

M. Upton

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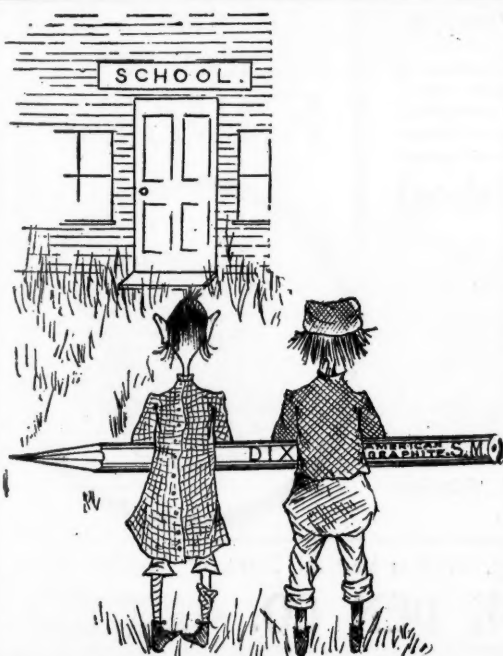
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THE SCHOOL JOURNAL

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Vol. LXVII.

For the Week Ending October 17.

No. 14

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The American College and the Peace of the World.

By Pres. W. H. P. Faunce, of Brown University.*

Horace Mann uttered a truth with which we are all familiar; but which we often forget, when he said: "Whatever you wish to have appear in the life of a nation you must first introduce into its schools." Every reform begins as a feeling, as an instinctive and unreasoned revolt; then it becomes an idea; then it passes into an education. No reform achieves anything until it passes beyond the hortatory stage, beyond the dream stage, and settles down to the serious, slow, plodding, irresistible work of education. Teach in the schools that society is a social contract, and that solely, and a little later you will have in the streets a French revolution. Teach in the schools the doctrine of *laissez faire* and you will soon have employers who steel their hearts against their fellowmen. Teach in the schools the essential brotherhood of all men, and you are doing much to pave the way for the federation of all civilized nations.

Moreover, whatever may be true of the old world, it is true in America that a large part of the moral energy of our generation is pulsating thru the American college. Some of us have been willing to leave the active pastorate in the hope of getting more deeply into the ministry. Once the Church monopolized the moral energy of the community; the man who wished to do good to his fellows must do it thru the avenues of the Church. Happily now for the Church itself, it is no longer the only avenue of moral energy. When I look down on the average Sunday morning congregation I am oppressed by the perception of how large a percentage of the average Sunday gathering—complacent, conventional, and respectable—is not likely to be seriously changed by anything that the preacher may do or say. By reason of mis-education, by reason of the warping influence of unhappy experience, by reason of the fixity that comes with years, by reason of fossilization of mind, a very large percentage will not be changed by anything that the Sunday service may offer. But you never can feel that way as you look down upon an audience of college men. As I look down upon four or five hundred such every morning I feel as if I were looking on a company of locomotives standing on the track with the steam up. No trouble about getting them to go! The only difficulty is to get them moving on the right rails. A large part of the energy of our time is pulsating thru the American college, and for this reason it is a supremely important matter how our colleges are thinking regarding international arbitration. In athletics our students are committed to the principle that whenever in intercollegiate contests there arises any dispute whatever it shall be referred to impartial expert opinion. Boys trained to believe that, for four years in a secondary school and for four years more in college, are getting hold of a principle that will bear wider application yet. In all their athletic sports our young men are made to learn, not only chivalry toward a defeated foe, not only loyalty to a defeated friend, but they are made to believe in the futility and brutality of violence; they are made to recognize that a dispute is to be referred always to brain and never to

brawn; that it is expert opinion that counts when two colleges fall out in a legitimate contest, and that they must submit instantly when the referee has pronounced his decision. If the Duke of Wellington believed that the battle of Waterloo was won on the playground at Eton, may we not believe that our college athletic fields are the rehearsals for Geneva Conferences and Hague Tribunals and Pan-American Congresses, and in their small measure are doing a little something to bring about the parliament of man, the federation of the world?

But there is another thing our colleges are doing—they are showing us the service of science in preparing a mechanism of international public opinion. I venture to say that public opinion in the international or even the national sense is a modern thing. Public opinion as a force, in the sense in which we now have it and can wield it, is something essentially novel, and something that depends for the machinery of its operation and the means of its execution on the apparatus furnished by scientific invention and discovery, often in the laboratories of our colleges. The world has acquired thru modern science, as it were, a new nervous system. The network of railways that cover the continent, the cables that pierce every sea, the wireless wonders of Marconi,—all these furnish a mechanism which is a nervous system to the world. What would it mean to a human being to acquire suddenly a new nervous system? Vastly more than it means for the world.

When Whittier sang, at the laying of the Atlantic cable, "Round the world the thought of all is as the thought of one," he never dreamed of the Suez canal or the Trans-Siberian railway. The modern Paul Revere hangs no lantern and mounts no steed at midnight; he simply steps to a telegraph office and events are announced in San Francisco long before they occurred in Massachusetts. When the battle of New Orleans was fought by General Jackson, it was because he had not heard of the treaty of peace with England, signed two weeks before. Under such circumstances a national consciousness could hardly exist; the whole country could not possibly have the same information or take the same action at the same time. To-day our nation may throb with indignation from end to end before breakfast, may form a national resolve before high noon, and execute that resolve within twenty-four hours. That means that national passion is more terrible, national conviction more formidable, and international opinion more irresistible than ever before in the world's history.

And here is the answer to those who say, "How are you going to enforce the decisions of the Hague Tribunal?" We answer, "There is no need of any army to enforce the decisions of all nations upon any one nation." There is no need of navies or armies to execute the decree of the entire civilization of the globe on any one factor of that civilization. The old ecclesiastical motto has application far outside the church: "*Securus judicial orbis terrarum*" (the whole world is sure to be right). The opinion of the whole world is self-executing. College men are the ones who ought to take charge of

* Address delivered before Lake Mohonk Conference on International Arbitration.

this new mechanism, and make it the implement of righteousness and peace.

I made a list the other day in my library of the men in the last century whose voices have been most potent against war and in favor of peace. On the list were such names as Voltaire, W. H. H. Lecky, John Morley, Frederick Harrison, Herbert Spencer—no one of whom would suffer himself to be called a Christian. Is it not strange that the great voices in fervent appeal to reason rather than to force should come from non-Christian sources? Are we proud of that fact? It is a rare thing indeed to hear from the Christian pulpit to-day a ringing utterance against war, or a fervid utterance in behalf of international arbitration. Perhaps this explains why so few of our young men know Emerson's "Boston Hymn," and so many multitudes are thoroly familiar with the splendid, virile, deplorable paganism of some of Kipling's lyrics. We need to come back to Emerson's noble summons:

"My angel, this name is Freedom,—
Choose him to be your king;
He shall cut pathways east and west,
And fend you with his wing."

The pathways are being cut. Let college men press in, and over those passes carry the message of "Peace on earth, goodwill to men."

One thing more. Our colleges and universities can give us a fresh reading of the story of creation, a truer idea of what the cosmic process is, by which our world has thus far been fashioned. We are suffering in many regions from a partial reading of the cosmic order, and a substitution of the cosmic for the moral order. I have no time to unfold this idea. Darwin gave currency to the conception that the lower orders of creation present everywhere a scene of relentless struggle, a struggle which results in the survival of the fittest and the extinction of the unfit. Friedrich Nietzsche has carried this doctrine into the realm of morals, and tells us that the law of the cosmos must be the law of man's spiritual nature as well. He frankly affirms that this is the part of the strong man, to "help nature in the elimination of the unfit, provided only that we use up the unfit in the production of the stronger man that is to be." This doctrine percolating down thru all the strata of society is profoundly affecting our industry, our politics, our society. It determines Russia's attitude toward the Jews. It is radically changing our attitude toward the negro. It is affecting all modern diplomacy,—the idea that the strong nations of the earth are to administer the world, and the weaker nations must necessarily go to the wall.

Now the college, thru its laboratories and its libraries, can show us that we have only partially read the story of the great world-order. Since Darwin died a whole host of facts have come to light, receiving poetic interpretation in the "Ascent of Man," by Henry Drummond, receiving scientific exposition in the last book of Prince Kropotkin, and teaching us everywhere that mutual aid is a factor in evolution. We are coming to see that the fittest to survive are not those with the strongest beak, and tongue, and claw, but those with greatest power to serve their fellows. We have come to see that the invalid in the sick chamber may render greater service than the stout mechanic; that not the bread-winner, but the love awakener is most needed in our strenuous civilization.

A truer idea of what the cosmic process has been, and is, will do much to rectify hasty inferences, and so unethical codes of conduct.

This, then, is what our colleges can do by the chivalry of true athletic sports; by teaching men the use of the powers and forces they are now discovering, by a clearer and deeper reading of the story of the world, they can help toward the consummation we so devoutly wish, and whose coming these conferences at Lake Mohonk are doing much to hasten.

The Story Tellers' League.

The American Story Tellers' League was organized July 28 at Knoxville, Tenn., during the closing days of the Summer school of the South. During the session of the school a number of twilight meetings were held on the lawn of the university campus. At these meetings teachers, representing almost all phases of educational work, told stories, many of which were used in school work. The meeting thus became a medium of exchange of stories and experiences in the use of the story.

The league started with upwards of seventy-five charter members, composed of teachers, writers, and educators representing all sections of the United States. The organizers of the movement, recognizing the educational value of the story and the importance of the story-teller, will give emphasis to two things—the story and the story-teller.

If what President Eliot says is true, that the literature for our young people is yet to be written, there is still a great field for development in creative work, in gathering folk-lore, and the arranging of stories from various historical and classic sources. During the past quarter of a century much has been done in that direction, but that there are somewhere, in the world's literature, many stories better than some used to-day we cannot doubt.

If it is true, as Dr. G. Stanley Hall says, that of all the things a teacher should know how to do, the most important, without any exception, is to be able to tell a story; then the time has come when the art of story-telling should be studied by the teacher and taught in all the normal and training schools. The importance of this is seen when we remember that the oral story is the first story that the child has, and that later in the grades the story is being almost universally used in the teaching of history, language, music, art, and other subjects.

Steps are being taken for the organizing of local leagues in a number of places for the development of better story-tellers among those who teach the young in school, home, and church.

Just how best we can accomplish the purpose of the organizers, time and experiment must determine. But, believing that there is a great work for us to do along the line of the best educational thought of to-day, we have spread every sail and are making for the mid-seas, hoping that we may discover lands not laid down in any chart.

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October 21, 22, 23, 1903

Program.

Wednesday, October 21, 8 P. M.

Devotional Exercises; Rev. Francis G. Peabody, D. D. Harvard University.
Addresses of Welcome:
Hon. Curtis Guild, Jr., Lieutenant-Governor of Massachusetts.
John T. Prince, Ph. D., Agent Massachusetts State Board of Education.
Hon. Charles R. Skinner, LL. D., Superintendent of Public Instruction of the State of New York.
Address: The Teaching of English.
President G. Stanley Hall, LL. D., Clark University.

Thursday, October 22, 9.30 A. M.

The Organizing Principles to be Observed in the Preparation of a Course of Study:
City Supt. William H. Maxwell, LL. D., New York.
Discussion; opened by Supt. Thomas M. Balliet, Ph. D., Springfield, Mass.
School Visitation—Announcements.
The Relation of the Superintendent to the Community:
Supt. J. G. Edgerly, Fitchburg, Mass.
Discussion; opened by Supt. Thomas R. Kneil, Saratoga Springs, N. Y.

Thursday Afternoon.

School Visitation.

Thursday, October 22, 8.00 P. M.

The Shortened College Course.
From the Standpoint of the Pupil: Miss Sarah L. Arnold, Dean, Simmons College.
From the Standpoint of the Public School: Supt. F. H. Beede, New Haven, Conn.
From the Standpoint of the University: President W. H. P. Faunce, LL. D., Brown University.

Friday, October 23, 9.30 A. M.

New England and Massachusetts Associations.

LORIMER HALL.

Business: New England Association.
Report of Committee on Legislation.
Report of Committee on Educational Progress.
Report of Committee on Necrology.
Report of Committee on Resolutions.
Election of officers.
Discussion: Moral Education. Opened by
Supt. Frank E. Parlin, Quincy, Mass.
Supt. Charles W. Deane, Ph. D., Bridgeport, Conn.
Supt. Homer P. Lewis, Worcester, Mass.
State Agent G. T. Fletcher, Northampton, Mass.
Business: Massachusetts Association.
Report of Committee on Legislation.
Report of Committee on Resolutions.

New York Council.

GILBERT HALL.

Business:
Report of Committee on School Legislation.
Election of officers.
Legitimate Uses of School Buildings Outside of School Hours:
Associate City Supt. Edward L. Stevens, New York.
Discussion opened by Ossian H. Lang, New York.
Preparation and Plans for the St. Louis Exposition:
Delancey M. Ellis, State Director of Education, St. Louis Exposition.

Friday Afternoon.

School Visitation.

Transportation Arrangements.

The New England Passenger Association and the Trunk Line Association have granted a special rate of one and one-

third fare for the round trip, on the certificate plan, to all persons attending this meeting. In order to secure the reduced fare a regular one-fare ticket to Boston should be purchased, and a certificate obtained from the ticket-agent. If your ticket-agent cannot furnish this, buy a ticket to the nearest station that can, and there purchase a return ticket to Boston and obtain the certificate. On arriving at the meeting, present your certificate with twenty-five cents to F. J. Sagendorph, Secretary of the New York Council, who will see that it is properly signed by the railroad agent and returned to you. You will then be able to purchase a return ticket for one-third fare. Tickets may be purchased on and after October 18, good for return not later than October 26.

HEADQUARTERS.

The headquarters of the association will be at the Parker House, Cor. Tremont and School streets.

Coming Educational Meetings.

Oct. 21-23.—Union Meeting of New England Association of Superintendents, Massachusetts Superintendents' Association, and New York State Superintendents' Association, at Boston.

Oct. 30.—Annual Meeting of the Brooklyn, N. Y., Teachers' Association, at the Girls' High School. Lyman A. Best, president.

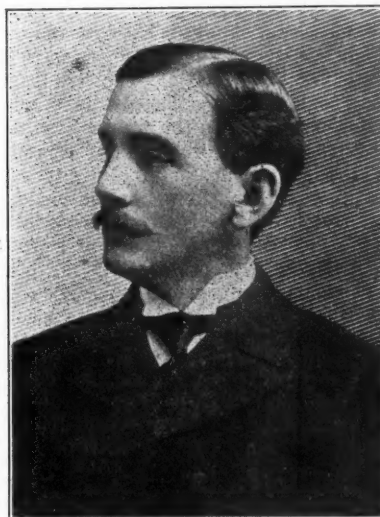
Oct. 30.—Hampshire County Teachers' Association will hold its annual convention at Northampton, Mass. Prin. Alfred B. Morrill, of Easthampton, Mass., president; Miss Sarah E. Martin, of Florence, Mass., secretary. Pres. William DeWitt Hyde, of Bowdoin college, and Dr. Scott, of Worcester, will address the general session in the forenoon. The afternoon will be devoted to high school, grammar and primary sections, with speakers for each.

Oct. 29-31.—Vermont State Teachers' Association, at St. Johnsbury.

Oct. 30-31.—Academic Conference, at Northwestern University, Evanston, Ill.

Nov. 5-7.—Northern Illinois Teachers' Association, at Joliet.

Nov. 29-30.—Association of Colleges and Preparatory Schools of the Middle States and Maryland.



Supt. Asher J. Jacoby, Milton, Mass., President, New England Association of School Superintendents.

Dr. Maxwell's Administration.

[First of a series of composite estimates to appear in THE SCHOOL JOURNAL.]

The present Greater City of New York was formed January 1, 1898. The magnitude of the task of combining into a single body the former governments of the present boroughs became nowhere more evident than in the attempt to unify the various educational bodies then existing. Further legislation created a new organization which took effect Jan. 1, 1901, and centralized the administrative work of the board. The former local boards were abolished and the city superintendent, who had at first been a little less than a supervising officer limited to general criticism and suggestion, now became the actual executive head of the system.

The existing school organization, therefore, is scarcely two years old, while the present city superintendent has been in office for nearly six years.

Mighty changes have been wrought in this brief period. In fact they amount to nothing less than a complete revolution. Their value in the advancement of the cause of free public instruction may be estimated by the results already achieved. The establishment of high schools and their organization, the improvement in the administration of truant schools, the appointment of special officials for more complete development of special branches of school work, and several other important phases of progress matured in this time, are omitted from present consideration, as the more direct credit for them may be justly claimed for the various borough boards of education. Much of this work was necessarily accomplished thru the initiative and suggestion of the city superintendent and bears the character of the man. However, it is not at all necessary to include a mention of these things in order to show how extensive the reforms are that have been effected by Dr. Maxwell.

To begin with, the legislation which established the present plan of administration was itself devised in consultation with Dr. Maxwell. The centralization of authority was the target of much honest criticism and its failure in practice was freely predicted. Let whatever may be the changes in the future government of this city, it may be affirmed that the idea of a single central board, the direction by a single official and a quasi cabinet of associates, and the division of the city into districts, under appropriate superintendents has so thoroly vindicated itself in its operation that it will be continued whatever changes the future government of the city may undergo.

Dr. Maxwell's greatest work in the city is the result of his labors for the practical adoption of his attitude towards teaching as a profession. His faith in the high ideals of professional dignity is absolute and unflinching. With this he combines an unflinching courage in striving for realization of these ideals. The task he set himself was big and could be accomplished only by a big man.

Since New York became the greater city, the examination of teachers has been vested in a separate body, a board of examiners nominated by the city superintendent. Of this board Dr. Maxwell is the chairman. Furthermore, more recent legislation has made Dr. Maxwell also the chairman of the board of superintendents which from eligible lists prepared by the board of examiners, nominates teachers and supervisors, which nominations have always been equivalent to election. The city superintendent is the only official who thus passes upon both fitness and appointment. His position necessarily makes him an important force in both bodies. A man of such strong personality as the present superintendent makes him the most powerful factor.

The direction in which Dr. Maxwell's influence has made itself especially felt has been in giving professional purpose and character to the examinations of teachers. All prospective candidates must now present evidence of some knowledge of the literature of teaching and of the principles governing teaching and school government.

The tests are so conducted that mere cramming and surface knowledge will not pass one. Moreover due credit is now allowed for experience and evidence of prolonged study in institutions of the best class. The influence these examinations have had upon the teaching force of the city is absolutely inappreciable by those who have not personally observed it. Ten years ago the professional knowledge of the great majority of teachers might be summed up in a collection of devices and methods and an undigested and unclassified array of isolated experiences. Visiting superintendents would suggest devices which were accepted with almost religious faith, and interpreted without reference to the broader knowledge of which they might be but a casual expression; not thru ignorance, but because of a mistaken conception of professional duty.

The science of education, so far as it was such, was purely empirical. The teachers, it must be admitted, were intelligent, industrious, and honestly devoted to their work, but only very few of them possessed more than a most imperfect conception of pedagogy from any philosophic standpoint. It has been objected that this system of professional examinations has given but a smattering of educational science, and that true professional instinct is not created by rules or order:—that only the thirst for knowledge—the search for light from within can make it. No doubt, there is much truth in this claim. But it misses the vital point. The necessity of such examinations may have been the impelling force in the majority of cases. The facts are that the large number of earnest students of education in our profession, the rolls of matriculants in the various universities, the ready understanding brought to the problems of organization and method that have been presented to the teachers in recent months,—all these things go to prove that, probably among the teachers of no city is there a more earnest body of students of pedagogy than among those of New York city. If the highest peaks have not been reached, we are at least climbing towards them, and the valleys of indulgence, ease, and self-content are every day becoming less populous.

The system of examinations has been the target of much bitter criticism. Stress has been laid upon the alleged extravagant estimate of so-called "book-learning." Yet this "book learning" is never accepted in lieu of actual ability. Licenses remain temporary for three years and become permanent only after two annual renewals, and upon the recommendations of school principals and superintendents. The critics could see only what appeared to be obvious faults of the new system; it required time and trial for development to establish the merits. It was natural that there should be among the enemies of the new departure also the few who had learned to depend on the favor of influence, social, political, and religious. An impartial observer must acknowledge that the professional instinct of the schools is higher, many times higher, than it was a decade ago. Frankness further compels an acknowledgment to the one man, who, above all, indifferent to clamor, discontent, or praise, has, with unvarying direction, sustained the position he first assumed.

Another strong evidence of Dr. Maxwell's determined stand for the dignity of the teaching profession may be found in the active part taken by him for higher salaries. The teachers of the city have never been able adequately to express their obligations to Senators Ahearn and Davis, and to their fellow-teachers thruout the state for a law which has freed them from the worries of financial uncertainty. In furthering these efforts Dr. Maxwell has been uncompromising and energetic.

The intellectually halt, lame, and blind have no place in a profession. This fact was recognized by the standard set for entrance to the educational field. Profes-

sional advancement must be properly rewarded; hence the movement for higher salaries was steadfastly sustained. The logic of Dr. Maxwell's effort is evident. He has never sought to gain demagogic favor by appealing to the lower instincts of taxpayers with arguments for cheaper instruction, whether for cheap books, cheap buildings, or cheap teachers. In this he has been fortunate to have had in the main the support of the boards of education with which he has been associated.

In this connection it is only just to say that New York city owes a debt of gratitude to the members of its board of education who have aided in the establishment

of public school endeavor upon a generous and worthy basis. Without remuneration they have cheerfully contributed of their time, labor, and influence to the general improvement of government of the schools, and their cordial support of Dr. Maxwell has made it possible to make firm the many changes that have been wrought.

[This summary of Dr. Maxwell's work embodies the principal points in letters solicited from two school principals, one of Manhattan and one of Brooklyn. In the near future THE SCHOOL JOURNAL will have a composite estimate of Dr. Maxwell's personality and work, which will represent the carefully considered opinions of eight leading school men in the city school system.]

New York City Syllabi. XII.

Ethical Training.

It should be the aim of every teacher to make each part of the life of the school count for moral education. This aim should be present not only in formal instruction and training, but also in the general atmosphere and spirit of the classroom and of the school. In working toward this aim, the following suggestions, based on the experience of practical teachers, will be found helpful:

1. The personality of the teacher is at the root of all moral education in the school. The teacher's ideals, sincerity, poise, self-control, courtesy, voice, manner, dress, and general attitude toward life are potent forces for character building.

2. Reverence is vital to morality. Whatever quickens in children the feeling of dependence on a Higher Power, whatever leads them devoutly to wonder at the order, beauty, or mystery of the universe, whatever arouses in them the sentiment of worship or fills them with admiration of true greatness, promotes reverence. There is no subject studied in school which, reverently taught, may not yield its contribution to this feeling.

3. Self-respect, which is also fundamental to moral development, is engendered in a child when he does his best at tasks that are worth while and within his power to do well, with proper recognition by teacher and school-fellows of work well done.

4. The cornerstone of a self-respecting character is principle—the will to be true to the right because it is right, whatever the consequences, to act "with firmness in the right as God gives us to see the right." The essential difference between principle and mere self-interest should be vividly brought home to each child.

5. The spirit of the class-room and of the school—the spirit that makes children say with pride "my class" and "our school"—is one of the strongest of moral forces. Where there exists a proper *esprit de corps*, the problem of discipline is largely solved. Public opinion as a moral force should be molded and utilized in every school.

6. The child should early gain the idea of social membership. The truth that co-operation and unselfishness are essential to true social living should be made real and vital. This truth is brought home thru "group work" where the work of each is necessary to the work of all; and thru the feeling in a school or class that the honor of all is in the keeping of each.

The child should also learn that he is a member, not only of the school, but of the family, of the neighborhood, of the city, and of the state and nation. The meaning of loyal membership of these social institutions should be made clear. The naturalness and the necessity of obedience and helpfulness should be shown. The moral aspect of home tasks; and of working with and not against the departments of health, street cleaning, police, and education, should be enforced by concrete applications. In general, the truth should be impressed that without loyal and effective social membership no individual can wholly live.

7. No person has a fully developed moral character until there has been a transfer of the seat of authority from without to within himself; a moral man obeys himself. Each child in every grade should be steadily helped towards self-direction and self-government. Effective means to this end are: appeals to initiative and resourcefulness; the development of such a sense of honor as will preserve order without surveillance; and some form of organization designed to quicken and exercise the sense of responsibility. The "school city," when wisely applied and shorn of unnecessary machinery, has been found effective in many schools. But the form of the organization is immaterial. The essential point is that the teacher, himself a member of the community, should make his pupils sharers to a certain extent in the problems arising out of their community life; and that he should entrust to them, as members in their own right of the social body, the performance of certain functions. Such training in social activity is effective training for citizenship. Under such conditions "good order" will mean not

so much the refraining from disorder as the condition of effective co-operation.

8. Each school study has a specific moral value. Literature and history embody in concrete form moral facts and principles, showing to the child his own self "writ large," furnishing him with ideals and incentives, and molding his moral judgment; and they will accomplish these results the more surely as the teacher is himself moved by that which is presented. Every subject involving observation and expression is essentially moral and should be so taught as to make for truth telling in word and act, and for training in self-expression.

9. In connection with the regular studies of the school, certain aspects of contemporary civilization which are of value for developing the social spirit should receive attention. Hospitals, societies for the prevention of cruelty to children and to animals, homes for orphans and for the aged and infirm, fresh air funds, and similar agencies for social service should be brought within the child's comprehension at the proper stage. Deeds of heroism and self-sacrifice done by firemen, policemen, soldiers, inventors, and persons in the ordinary walks of life, should be presented and dwelt on. The truth that success in life means more than mere money-getting can thus be brought home again and again. The contemplation of deeds of cruelty, dishonor, and shame has a necessary, tho subordinate, place in molding moral taste.

10. The following list of topics will supply material for many practical lessons in morals and manners:

(a) Duties to parents, brothers, sisters, and playmates; to servants and other employees; to employers and all in authority; to the aged, the poor, and unfortunate.

(b) Conduct at home, at the table, at school, on the street, in public assemblies, and in public conveyances.

(c) The common virtues, such as regularity, punctuality, self-control, cheerfulness, neatness, purity, temperance, honesty, truthfulness, obedience, industry, and patriotism.

11. In all such moral instruction and guidance the following principles should be observed: (a) the course of moral training is a development, in which the child is first led to practice and afterward to work from principle; he proceeds from obedience on faith to obedience on principle; from regularity to faithfulness. The child also develops from egoism to altruism. His impulse towards self-interest normally develops earlier than his impulse to put himself in another's place. Upon the full development of the former stage depends the full development of the latter.

(b) The culture of the imagination is a powerful aid in moral instruction; first, as the power vividly to picture consequences—to put yourself in your own place later on (fore-sight); secondly, as the power to "put yourself in his place" (social imagination, sympathy).

(c) In using literature and similar material for purposes of moral education, the teacher should not violate the law of self-activity. The child properly resents having a moral drawn for him which he could draw for himself and he is the more likely to follow the principle which he himself discovers or formulates because it is his own.

(d) The most effective method in moral education is positive rather than negative. A mind filled with good interests, high ideals, and helpful activities has no room for evil. Love is a stronger and better motive than fear.

Owing to unusual pressure upon the columns of THE SCHOOL JOURNAL this week the first instalment of the syllabus of drawing and constructive work will be deferred until next week.

The great union meeting of superintendents to be held at Boston on October 21-23, ought to draw a large attendance. Eastern school men who can make it possible to get away from their work for a few days at that time should certainly make it a point to be present. It will be an event of considerable moment in the professional progress of teaching.

Proposed Outline Course in Nature Study.

(Presented to the Chicago Principals' Association by its Committee on Nature Study.)

Grade I.

Physiology.

Breathing.—Measure of chest and chest expansion; movements of the ribs in breathing; capacity of the lungs. To measure lung capacity, exhaust the breath into a toy balloon or the rubber bladder of a football, or a punching bag, or use a pneumatic trough. Number of respirations per minute. Breathing thru nostrils; advantages. Machinery for ventilating the school-room. Vapor in exhaled air; warmth of exhaled air. What breathing is. Purification of the blood. Locate the heart by feeling its beating. Compare the number of pulsations per minute when quiet with the number after exercise. Find arteries in the wrist and neck. Note correspondence of pulse and heart beat. Veins in the hands. Uses of the heart and blood. No detailed explanation of the circulation.

Zoology.

The Grasshopper.—See grasshoppers out of doors in the grounds; what can they do? How far can they jump? Are they easily caught? With what do they jump? Are the legs all of the same size? Which are the larger? Can a grasshopper see? Do you see the eyes? Can a grasshopper fly? With what does it fly? How many wings has a grasshopper? Are all the wings of the same kind? What does a grasshopper eat? Watch one eat and see how it moves its mouth parts. What is the use of the two feelers on the head? These are called antennae. Watch a grasshopper breathe. By careful looking you will see some little holes along the sides of the body, which are called spiracles, and it is thru them that the grasshopper breathes. He does not breathe in the same way that we do.

Grasshoppers may be kept for some time in a cage made of wire screen or mosquito bar, or in a glass jar, and their actions easily observed. The cage should have some sod with grass in the bottom. Grasshoppers are injurious insects, and no compunction should be felt in killing them. They come in the same category with bed bugs, cockroaches, and clothes moths.

Cecropia Moth.—This is the largest and finest moth that we have. It is abundant in cities, where its larva feeds on shade trees of almost all kinds. The larva is a large green caterpillar which matures the latter part of August or the first part of September. From observations of the caterpillars the children may be led to answer the following questions for themselves:

How does the caterpillar eat? Which way do the jaws move? How does it hold on to the leaves? How many legs has it? Are the legs alike? How many rings of the body are there? On which rings are the legs? Do you find any breathing holes along the sides? If possible watch the caterpillar making its cocoon. What is the shape of the cocoon? Is it fastened to anything? From what place does the caterpillar get the silk? Can you find cocoons on the trees?

Caterpillars may be kept and fed in breeding cages made of wire screen, or mosquito bar, or even in a glass jar. A large caterpillar is likely to begin to make a cocoon very soon after it is put into the cage.

In the spring the moths appear. The moths are large, heavy-bodied animals, with a spread of wing of about four or five inches. They do not eat anything, their only function in the mature condition being to lay eggs. So a moth may be kept in the cage without feeding it and the eggs observed as they are laid. If a number of cocoons are collected in a cage, it is easy to discover one of the moths as it is emerging from the cocoon. The moths are seldom seen flying in the daytime, their most active period being at the time of morning twilight. The male can be distinguished from the female by the smaller body and the more complex antennae.

Cat, Rat, and Mouse.—The domestic cat as a type of mammals. Have the children observe the cat, either at home or in the school-room, and answer for themselves the following questions, which are only suggestions of the kind of topics that may be discussed: What is the covering of the cat? How does the cat's hair differ from our own hair? Of what use is the hair of the cat? Note position, color, and parts of the cat's eyes and shape of the pupil. Is there a difference in the shape of the pupil at different times of the day? Can a cat see better than we can? Can a cat see at night? Of what advantage is it for a cat to see at night? Examine the toes. How many claws on each foot? What is the shape of the claws? For what are the claws used? How is the cat enabled to move so silently over the floor? How is the cat enabled to climb a tree? What kind of teeth has a cat? Of what use are the long teeth? Of what use are the long "whiskers" or hairs near the mouth? What are the young of cats called? Of what use are cats and why do we keep them in our houses? How does a cat drink milk?

It is suggested that some child's pet cat, perhaps with a

family of kittens, may be brought into the presence of the school in a cage, so that children may have a common subject of observation. In the same way captured mice or rats may be made objects of study. From such objects the children may be asked to observe and answer such questions as the following:

What do rats and mice eat? What harm do they do? How do their teeth differ from a cat's teeth? Can you observe places where they have been gnawing? With which teeth do they gnaw? How do we kill rats and mice? What kind of traps are used?

Botany.

Fall Plants.—Dandelion. By comparison, the aster, goldenrod, sunflower, thistle. Observe the flower, its color, and some of the changes that take place as the seed ripens. Let the children find the leaves of the plant, and observe that they do not grow on a stem but seem to come directly from the ground or from the root of the plant. The flower is a cluster of flowers; observe that insects are frequently found visiting it. At night and in cloudy weather the flower closes up. After being open for a few days, the flower closes for a longer time, altho the stem keeps growing. Observe that the flower finally opens, but that it presents an entirely different appearance. The seed has ripened and at the top of the stem, or scape, is a sphere of downy white hairs. What is the use of these hairs? Where are the seeds? What becomes of the seeds when they disappear?

Observe in the same way the thistle, goldenrod, and aster. See how the milkweed differs from the others, but observe that the seeds are alike in being provided with hairs. What is the use of these hairs?

Autumn Leaves.—Have children observe and state what they see with reference to the following:

1. Changes in color as the season advances.

2. Fall of leaves. Compare the trees that lose their leaves with the Christmas tree (evergreen).

Collect various kinds of leaves, especially those with attractive color. (Beware of the poison ivy, the vine of which bears leaflets in threes.)

Fruits and Nuts.—Study the apple as a type of fruits. Have children observe and state the results of their observations with reference to the following: The general shape of the apple; the stem end and the blossom end; the color; the peeling; the core; the seeds. Where do apples grow? In how many ways do we use apples? Of what use are the seeds? Show pictures of apple trees in blossom if the real blossoms cannot be obtained.

By way of comparison, study the fruits of the orange, lemon, grape, and banana. Observe that the banana produces only traces of seeds. Pictures of the banana tree may be employed, but the plant itself may be observed in some of the greenhouses.

Nuts.—Collections of nuts may be made and used year after year for this study. The entire nut, including the covering, should be obtained. Those nuts that are ordinarily found at fruit stands and so come more or less naturally into the experience and observation of the children are the nuts suggested.

Use the chestnut, English walnut, or pecan. Observe the hull, the shell, the kernel, the shell partitions, if any. Show pictures of the trees from which the different nuts are procured.

Germination.—Begin to observe the sprouting of seeds. Seeds may be planted in a damp sponge, in cotton, between moist blotters, or other media. If seeds be planted in a gas chimney filled with soil, their germination may be easily observed from day to day. Place a sweet potato loosely in the mouth of a bottle so that the lower end of the potato will be in the water. In a few weeks it will send out thrifty vines.

Spring Flowers.—Violets. Pussy-willows. Pupils should observe the colors of spring flowers and learn to appreciate their beauty and fragrance. They will quickly learn the names of the flowers that they gather, and these names should be freely used.

Spring Leaves.—The unfolding of leaves from buds. Place lilac and other twigs in water. Learn to recognize the leaves of a few trees, and then identify the trees by means of their leaves. Show pictures of typical trees.

Astronomy.

During the first year the pupil should become familiar with the cardinal points. In establishing the east and west points, the pupil may note the points of sunrise and sunset about September 20. The cardinal points may be fixed in the pupil's mind by reference to the four walls of the school-room or to the directions of the streets near the school.

Meteorology.

The work in this subject should be conducted for the most part to accumulate data for future use. The following ob-

servations may be made: Is the day cloudy? Clouds for only part of the day? Does the sun shine? Is the day rainy? Note snow, hail, frost, or dew. Temperature and reading the thermometer. The items above should be kept on a large sheet of paper or on the blackboard each day for a month, and in the other seasons for a week at a time. Colored chalks can be used very effectively in making this record. At the end of each period the teacher may summarize the observations.

Physics.

Color.—Show children colors. Have them find things in the room of the same color. Arrange colors in order. Have pupils make the same arrangement.

Taste.—Taste sweet, sour, bitter, salt.

Smell.—By the sense of smell distinguish fruits, garden vegetables, and fresh grown material wherever practicable, children not seeing the object.

Hearing.—Use of hearing in telling direction of sound.

Touch.—Use of touch to give idea of shape, as round, flat, square. Arrange solids. Have pupils give the same arrangement.

Grade II.

Physiology.

Motions of the Body and How Muscle Produce Them.—Find muscles used in bending and straightening the arm. In throwing, walking, and other movements. Examine lean meat. Fibrous structure. Effect of exercise on breathing and heart beat. Need for exercise. Effects of too little exercise.

Study of various bones of the skeleton; their uses; uses of joints. Find joints in the body. Study the kinds of motions that are made possible by joints. Examine the structure of a joint as exhibited in the leg of a sheep or other animal.

Zoology.

Cockroaches.—The small brown croton bug and the large black cockroaches found in houses. Note what they eat, how they walk, observe the wings and feelers. Find the bean-shaped egg cases. Means of destroying cockroaches. One method is to use a mixture of finely powdered borax and chocolate. They eat the mixture for the chocolate, of which they are fond, the borax kills them.

Crickets.—Where found? Their song and how the males produce it. Feelers and their use. Mode of locomotion compared with that of the cockroach. Number of legs. Food. Not ordinarily a harmful insect.

Cow.—Useful products of the cow; milk, cream, butter, cheese, beef, veal, candles, soap, leather, combs, buttons, hair (in plaster), glue. Collect specimens. Keep milk until cream rises. Churn some of the cream. Curdle milk with some acid, or allow it to stand until sour in order to show curds and whey.

Food of the cow. How the cow eats. Arrangement of the teeth. No biting teeth above. Chewing the cud. Locomotion. Feet and their structure. How the cow lies down, and gets up.

Horse.—Uses of horses and kinds used for different purposes. Modes of locomotion. Walk, trot, canter, gallop. Hoof compared with that of a cow. How the horse lies down, and gets up. Horseshoeing. Food, kinds and quantity. Care of horses.

Botany.

Fall Flowers.—Have children observe and collect as many of the fall flowers as can be easily found in their vicinity. Make a study of the thistle, aster, goldenrod, milkweed, and sunflower. This work is essentially a continuation of work for the same season in the first grade. Observe in the thistle, the flower, the fact that the flowers are in clusters, that the flowers are visited by insects, such as bumblebees. Discover or try to learn what is the use of the spines on the leaves. What is the condition of the younger thistles that are not producing flowers? In this way the idea of biennial plants can be introduced. When the thistles ripen, the changed appearance of the flowers and the way the seeds are blown about by the wind may be profitably observed; also the effect of the action of the wind upon the distribution of the thistle plants.

By comparison with the thistle, other plants may be quickly studied. One important thing is that the children shall become acquainted with the individuality of flowers sufficiently to recognize them by sight and by name.

Mosses.—Mosses may be recognized by the children and sufficient acquaintance with them obtained to distinguish them from other small plants. Children may be taught where and how to find mosses, the kind of places in which mosses most frequently grow, and may observe that they consist of a stem, unbranched with leaves, the sporocarps at the top of the stems. By such marks the children may be taught to distinguish true mosses from many lowly organized plants, such as algae, that are commonly called mosses.

Ferns.—Recognize ferns as they are found at home, in the greenhouses, and if possible, in their native places. The fact that the fern produces no flowers, and that the fruit is borne on the backs of the leaves, together with the peculiar method of the unrolling of the fronds as they spring from

the ground, are within easy observation of the children. These observations of mosses and ferns will be needed to understand the way in which coal has been formed.

Common Trees.—What trees shall be selected will depend entirely upon the locality of the school. Only those should be selected that can be examined by the teacher and pupils, and it is much better that they should be in the vicinity of the school. Trees are known and recognized by the character of the bark, leaves, wood, shape, and method of branching. The sum of these characters constitutes the notion of the tree that an observer obtains, and the name combines the characteristics into a single idea that the children can use. So trees should be recognized by their characters, the time and method of shedding their leaves, the appearance of buds and leaves in the spring, and the kind of fruit and flower if it can be observed. This, together with the names of all trees studied, should be the general nature of the work in this grade.

Germination.—In the spring months, the germination of seeds may occupy the attention of the children of the second grade, as a continuation of the work for the preceding grade. Seeds of weeds and other wild plants may be collected in the fall, and such seeds, planted in the spring, constitute the best material for studies on germination. The difference in seedlings will naturally obtrude itself upon the notice of children, and the recognition of plants in their seedling condition will follow. Planting and tending of seedlings by the children at home should be encouraged. The seedlings started at school may be given the children to transplant, and such methods of propagation will then be understood.

Spring Flowers.—The work upon spring flowers will consist essentially in becoming acquainted with the flowers that can be found in the vicinity of the school or the homes of children. After flowers have been recognized, an accurate drawing or painting, or, if possible, good pictures of the flowers may be retained in the school-room as a means of review. The actual specimen pressed may be preserved, but this is not likely to be any better for children of this grade than the drawings or pictures. It should be noticed that in order to be of the greatest service, a picture should represent the same species that the children have studied and observed for themselves.

Vines.—The growth, climbing, twining or running of vines may be easily observed in proper localities. Vines planted in window boxes will furnish material for profitable lessons upon such plants.

Geology.

The purpose in this work is to lead children to recognize the difference between sand, limestone, and clay. Coarse sand is better for this study. Children will readily recognize and state that sand is composed of grains, that the grains are of different colors, and that they do not stick together, and that water is readily absorbed by the sand mass. Wet sand looks different from dry sand. Sand that is dry, is somewhat easily moved by the wind, and along the lake shore the effects of wind in producing sand ridges and ripple marks may be observed. Children will know that sand is found along the shore of a lake or river and an experiment of washing some of the ordinary soil of the vicinity will show that sand is a constituent of it. Putting the two observations together, children will draw the conclusion that the sand on the lake shore comes as the result of the washing out of the soil the other materials that are not sand.

Clay.—The difference between sand and clay will be recognized. Clay is not made of the coarse grains that are found in sand. Clay alone does not make good soil. Sand alone does not make good soil. Sand and clay mixed in the right proportions make good soil. Clay is so sticky that it can be molded into definite shapes, and pottery and bricks are made from it.

Limestone.—Limestone is the bedrock of this vicinity, and many limestone pebbles are found. From stone yards many good pieces for study may be had, and the foundations of almost all buildings in this city are made of limestone. Children can be taught to recognize the properties of limestone and that it is a comparatively soft stone containing few fossils. The various uses of limestone, so far as they may come into the experience of children, should be studied. That limestone will bubble when acid such as vinegar is poured upon it, furnishes a sufficiently distinctive test for children of this grade.

Coal.—1. Uses of coal. We burn it in stoves, grates, and furnaces. We warm houses by burning it in steam, hot water, and warm air furnaces. We cook our food with it, and burn it to make steam to run engines and locomotives. It is also used for making gas. Have children make gas in clay pipes or in test tubes. Collect the gas over water and burn it. Explain a gas plant. Show pictures.

2. Kinds of coal. Soft or bituminous, and hard or anthracite coal. Soft coal is the only kind that is used in making gas. Hard coal produces no gas. Practically very little coal is now used for making gas. Other methods that are less expensive have been devised.

3. Where coal comes from. Coal is dug from the mines that are down in the earth. Show pictures and draw sections of coal mines. We cannot mine it ourselves, and would have

to do without it unless someone else dug it for us. (Work here upon the social consciousness).

4. What coal is. It grew like trees and ferns and moss millions of years ago. Plants could not grow without sunshine, so coal is sometimes called stored-up sunshine. Have children make stories about coal. Print the stories for reading. Read other stories about coal.

Astronomy.

It is desirable that the children should discover the fact that the sun does not rise always at the same point or set exactly in the west. It will be sufficient for the present to make the children conscious of the fact. Do not attempt an explanation. To teach this, have the pupil observe in September, in December, in March and in June the point of sunrise or sunset with reference to some east and west street.

Circumpolar Stars.—The location of Polaris and the position of the Great Dipper with reference to Polaris should be observed. In teaching the constellations, instruction must first be given in the school-room so that the child may know what to look for. The teacher may draw upon the black-board upon the north side of the room the stars of the constellation in their proper relative position. The children should reproduce the drawing until the relative positions are fixed as well as they may be. Having become familiar with the relative groupings of the stars the children should be able to find the constellation for themselves at a specified time in the evening.

Have the children watch for the new and the full moon. In what part of the sky do we see them? What is the shape and position of the new and of the full moon? How soon do these forms appear again?

Meteorology.

The work of this grade is practically a continuation of the work of the first grade. Keep also a record of the wind. Distinguish light, moderate, and strong wind and gale. From what direction does each wind blow? Do more winds come from one direction than from another? Note the effect of storms in the vicinity.

Physics.

Color.—Have children mix colors of chalk, producing secondary colors. Arrange a number of colors in a series, requiring pupils to give same order.

Hearing.—Train pupils to recognize voices of playmates, tones of different pitch.

Properties of Bodies.—Compare weights of the same materials and of different materials.

Teach:

1. Solids as shown by snow and ice.
2. Liquids as shown by water.
3. Vapors as shown by fog and clouds.

Elastic bodies—bodies that will bounce.

Light.—Prism separating light into its primary colors. Colors of rainbow, soap bubbles, colors thru colored glass, sunset tints. Study of shadows.

Grade III.

Physiology.

Eyes.—Use of the eyes. Contrast with the condition of a blind person. How we see. Necessity for light. Parts of the eye. The eyelids and their use. Protection and moistening of the eye-ball. Eye-lashes. Eyebrows. The ball of the eye. Pupil, iris, cornea. How the pupil enlarges and closes. Contrast with the eye of a cat. Explain about the eyes of an owl. Advantage of the varying size of the pupil. Avoid too bright light. Do not look directly at the sun.

The use of tears. How the eye is kept moist. Injury to the eyes. Avoid rubbing them when a foreign body gets into the eye. Do not read with the light coming from the front. Light should come over the left shoulder. Use of glasses.

Ears.—What we learn thru the sense of hearing. Make a list of all the sounds you can hear in a few minutes. How we hear. Parts of the ear. The outer part, or concha. The middle ear or drum. The inner ear. How the drum of the ear communicates with the mouth. Contrast with deaf persons. What a deaf person must do in order to communicate with others. How to avoid being deaf.

Do not insert hard or pointed objects into the ear. Do not strike the ear with the hand. Do not come too close to loud noises.

Teeth.—What we do with teeth. The advantage of having teeth. What people do that have no teeth. How many teeth we have. Kinds of teeth; incisors, canines, molars. Care of the teeth. Should be brushed at least once a day to prevent decay. Should not eat things that are too hot or too cold. Should not bite hard things, or crack nuts with the teeth.

Milk teeth and permanent teeth. Number in each set.

Zoology.

Spiders.—Recognize two or three common spiders, noting resemblances and differences of color, size, and structure.

Encourage outdoor observations. Have pupils report individually how a spider walks, jumps, eats and gets its food. Can a spider live in water? Find eyes. Locate and tell the uses of the legs. Find the egg sac. How long before the eggs hatch? Compare a young spider with an old one.

Watch the making of the web and the catching of insects. Are spiders useful? Are they harmful? Have pictures or drawings made of spiders studied. Also employ the aid of a magnifying glass for the better study of the eyes, feet, spinnerets, web.

Dogs.—Have children name all kinds of dogs with which they are acquainted. Newfoundland, St. Bernard, bulldog, terrier, shepherd, pug, greyhound, etc. How does each differ from the others? For what is each one especially adapted?

Covering of a dog. How does it differ in different kinds of dogs? How many toes on each foot? Compare the claws with the claws of a cat. Can a dog climb a tree? Why? What wild animals are very much like a dog? Notice the teeth of a dog. The four long pointed teeth are called canine teeth. What is their use? Does a cat have such teeth? Does a human being have such teeth? What kind of food does the dog eat? Sense of smell. How does it compare in keenness with our own? Of what use is the sense of smell to the dog?

Hen.—Uses of eggs. Parts of an egg: shell, yolk, white. Effect of boiling. Hatching of eggs. Sitting hen. How long must the hen sit before the eggs hatch? Appearance of the young chickens. Incubators. The hen. Feathers. Their use to the hen. The feet. How many toes on each foot? Use of the feet for scratching; for roosting. Food of the hen. Beak. Hens swallow their food whole. It is softened in the crop and ground up in the gizzard.

Duck or Goose.—How do the feet of a duck (or goose) differ from the feet of a hen? Use of webbed feet. How do the feathers differ from those of a hen? Difference in the beaks of a hen, a duck, and a goose? Uses of the feathers of a duck or goose.

Snails.—Snails are easily procured in the spring from ponds, and may be kept as long as desired in the school-room in jars or bottles of water. Clusters of eggs will likely be found attached to the sides of the jar. Observe the method of crawling over the sides of the glass. Careful observation will enable children to see the mouth in the middle of the surface attached to the glass, also the tongue with which the food is scraped from the glass. Observe how the snail crawls over the glass. Distinguish the front end of the body from the hind end. See how the shell is carried as the snail crawls. Observe how the snail withdraws into the shell. Snails may also be seen crawling along the surface of the water.

Study the shell. Observe that it is shaped like a funnel, or trumpet coiled around a center. Distinguish the method of coiling. It may be coiled spirally, either to the right or to the left, or rolled in one plane. All of the three kinds of coiling are common. Draw the snail when it is seen extended, and in the shell.

Clams.—Clams may be obtained from creeks and ponds and kept in aquaria for a long time. Some dead shells will be useful in teaching the children to understand how the clam moves and lives. Children can observe that the clam moves from place to place in the sand at the bottom of the river, or of the aquarium in which the clams are kept. They may be able to observe the sudden spring or jerk, also the protruding foot by which the movement is accomplished. The siphons by means of which the clam takes water into the shell for breathing and for the securing of food can be easily observed, and the difference between the excurrent and incurrent siphons can be detected by means of currents flowing into the one and out of the other.

Study and draw the shell. On the outer surface notice the epidermis, the umbo, the anterior and posterior ends. On the inside of a dead shell, notice the hinge teeth and the muscle scars.

Fish.—Minnows in an aquarium will do well for this study, altho observation of fish in markets and other places should be encouraged. Children should notice the fins and how the fish uses them, the scales on the body and how they overlap each other. The mouth is constantly opening and closing for the purpose of creating a current of water over the gills. The water enters the mouth, and passes out at the gill openings behind the head. Minnows can be trained to take food from the fingers. Observe the eyes and notice the direction in which they can see.

Botany.

Seeds.—During September, have pupils make collections of seeds of the common weeds and trees in the neighborhood. Preserve the seeds in boxes or small bottles. While collecting, notice the special devices by means of which seeds may become scattered, such as wings, hooks, bristles. Observe also the various agencies by which seeds are transported, such as wind, water, and animals. Man is one of the chief agents by means of which plants become distributed over the earth. It will be recognized that the principal benefit comes from the collecting, and not from the collection after it has been made.

Fall Changes.—Observe the changes that occur in plants at the approach of winter. Observe the changes of color and the fall of the leaves. What trees do not shed their leaves? How are the buds protected from the rain and the cold of winter?

Notice carefully the common trees of the vicinity, paying particular attention to the general appearance. The bark, leaves, and fruit. Learn the names of all trees in the vicinity. It will be found helpful for each pupil to make a study of one tree, sketching its appearance at different seasons of the year.

Spring Changes.—Observe the swelling of the buds, the flow of the sap and the unfolding of the leaves. Describe the making of maple sugar.

Germination.—Let the pupils observe the germination of seeds both in the school-room and at home. How long does it take seeds to germinate? Compare the seedling of a morning glory with that of the corn. How many seed leaves has each? Why do seeds thrive better in one place than in another? Dig up a square foot of soil that is not sod, three or four inches deep. Put the soil into a box, keep it moist and observe the number of different kinds of seedlings that will appear.

Have children make a collection of the different wild flowers that may be found in the vicinity of the school. A record of these wild flowers and the dates of collection will be of great interest.

Geology.

Stone.—Common building stones. The attention of children should be directed to the different building stones, such as limestone, sandstone, granite and slate, with their uses and relative commercial value. If there is an outcrop of limestone in the vicinity, it would be well for the pupils to go to see it. Also visit a stone yard, wherein may be seen the stone and the processes of cutting.

Effects of Freezing and Thawing.—Pupils may easily observe the effects of freezing upon a bottle of water, or a bottle of milk. From this they will recognize that freezing expands water with great force. Children will readily infer that stone is crumbled and soil loosened up and made finer by the freezing of the water that has penetrated into them. Examples of such effects may be observed upon the approach of spring.

Astronomy.

Angular measurement of the sun's noon altitude. The children should by this time have learned what an angle is and how it is measured. The purpose of this measurement is to show that the sun's altitude at noon varies 47 degrees from Dec. 21 to June 21. It should be measured at the time of the solstices and the equinoxes. It is also intended to show the noon altitude at the beginning of each season, thus determining a natural indication of the beginning of each season.

The shadow stick or the skiameter may be used for making this measurement.

Observe the position of the sun at different times of the day. Notice when it appears directly east or west. From the different positions of the shadow of a vertical stick, tree, or side of the house, construct a sundial. After the idea has been clearly understood a more accurate construction may be made.

Distinguish the figure of the moon at the first and at the last quarter. Note its position in the sky at such times, with reference to the sun. Note also its time of rising or setting at such times.

Meteorology.

Keep a weather record for the month of January.

Physics and Chemistry.

Color.—In the previous work, children have learned the strikingly contrasted colors. Now we should try to develop their powers of distinguishing between the shades and the tints of those colors. This will lay in part a foundation for descriptive work.

Emphasize the fact that certain fruits, vegetables, leaves, trees and roots have characteristic or type colors. This work can be given in connection with the work suggested for study in the botanical topics, by using painted or colored crayon sketches of groups of fruits, leaves, nuts, vegetables and grains, which will be sufficient to fix the type color. These type colors have given rise to such expressions as, "Brown as a nut," "Gay autumnal colors," "Beautiful golden grain," and "As red as a beet." A little work in coloring plain substances with diamond dyes will help very much to make the work of color study effective. If raffia is used by the children, a lesson in coloring it will serve several good purposes.

Properties of Bodies.—During November, experiment with various substances to illustrate solids and liquids, and to show that a change in the temperature of a body may change its condition from that of a solid to a liquid. Melt butter, paraffin, beeswax, lead, zinc. Try iron. Why are stoves made of iron? Of what is the lining of a furnace composed? Why? Illustrate soluble and insoluble substances, elastic and non-elastic bodies, ductility and malleability, and their value to us in common pursuits.

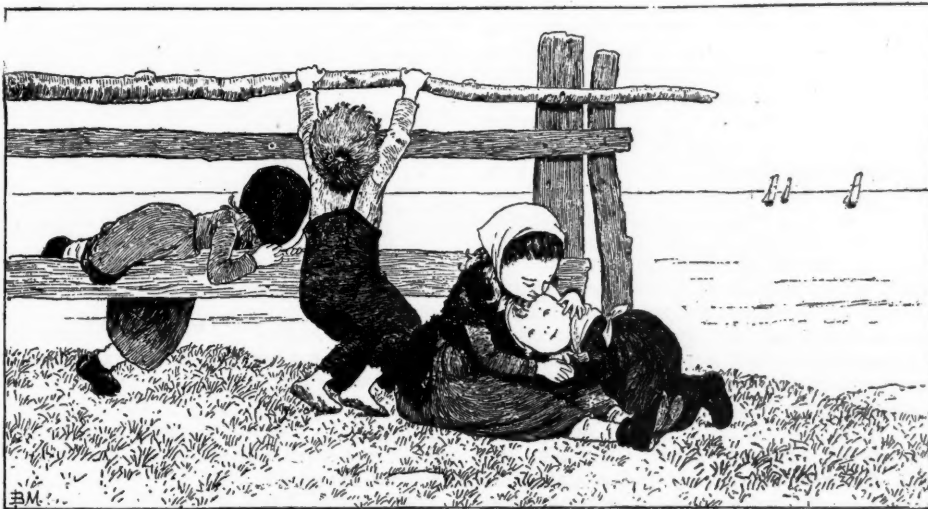
Chemicals.—During December, study the common chemicals to discover their more obvious physical properties; alum, soda, sulphur, camphor, chalk, starch, and baking powder. Have the children begin to tabulate the results of the investigation of the above materials, pointing out likenesses and differences.

(To be Continued.)

Next to "Don Quixote" and "The Cid" there is no Spanish literary masterwork deserving of so high a place as Calderon's "La Vida es Sueno." Students of the Spanish language certainly should be familiar with it. A very good edition is that recently brought out by A. Flanagan Company, Chicago, with Dr. Fernando Staud y Jimenez and Dr. Hubert M. Skinner as editors.

The new edition of Webster's International Dictionary, recently issued, again brings this work abreast of the times. Particularly to be noted is the fact that the gazetteer and biographical dictionary have both been carefully revised and reset. The gazetteer has been made to accord with the latest census returns and recent geographical discoveries. In the biographical dictionary a large number of new names have been inserted and the old data have been verified. The new edition of Webster retains all the excellencies of the International, emphasized and multiplied; all its accuracy and convenience, with added fullness and authority, so that it is, as before, the best practical working dictionary of the English language.

It is the best dictionary for practical use, for it is easy to find the word, ascertain the pronunciation, trace the growth, and learn the meaning. It is the general opinion that it is the best dictionary for school use.



Some of M. B. de Monvel's Children of the Seacoast.

The School Journal,

NEW YORK, CHICAGO, AND BOSTON.

WEEK ENDING OCTOBER 17, 1903.

THE SCHOOL JOURNAL has been planning a special treat for its readers in the shape of composite pen sketches of the best-known American educators and public school administrators. An initial article treating of the victories won by Dr. Maxwell's administration of the school system of Greater New York is published in the present number. The plan adopted ought to result in a most interesting series, eliminating every phase of personal prejudice and preconception to the utmost degree. A composite portrait of Mr. Maxwell will be presented next week.

One other new feature, which has been maturing for nearly two years, and whose success is now at last assured, is the inauguration of a systematic discussion of the question of adequate remuneration of teachers. Prin. William McAndrew, of the Girls' Technical high school, of New York, whose valiant work in this field has given him a national reputation, will be in charge of the department. The intention is to carry the discussions thru the whole year, in at least two issues each month. One of the questions to receive special consideration will be the fixing of the minimum for teachers' salaries in the public service, whether this be in a small district school or a grade in a highly organized system. Care has been exercised in laying out the plan so as to make it yield the largest possible benefit to our readers and the teaching profession in general. A point which will never be lost sight of is that a teacher, in order to be worthy of professional salaries, must take more than a mercenary interest in school work, must really take a professional stand, studying and perfecting himself constantly in the theory and practice of teaching.

THE SCHOOL JOURNAL rejoices at the recognition accorded to a leading member of the educational press in the appointment of Dr. Albert E. Winship as a member of the Massachusetts state board of education. The rank and file of teachers in Massachusetts will now have a chivalrous spokesman on the state board. Probably no man in this country has a wider personal acquaintance among educational workers than Dr. Winship, and on his own home ground in New England he has won an especially large number of acquaintances and friends among the teachers.

The most important matter to come up before the Massachusetts board in the near future will be the election of a successor to Mr. Frank A. Hill. The standard set by Horace Mann as the first secretary, and so nobly upheld by him whom death removed from our midst a few weeks since, ought to govern all other considerations in the choice. The best man to be found in the commonwealth should be invited to the office to continue the good work of the past. The board did well in choosing Mr. Hill; and it should again rise to the occasion, as it did then. The man who stands out by head and shoulders in points of fitness and merit is unquestionably Dr. Thomas M. Balliet, who has for many years been the superintendent of the schools of Springfield, and has won the respect and admiration of the most thoughtful educators thruout the country. He is a practical school man, with a rare breadth of view and firm grasp of the greater social problems involved in public education. He would carry educational enthusiasm into every school district of the great commonwealth, and the eyes of every state would be drawn to follow his work with interest and profit. As a superintendent of schools Dr. Balliet has no superior in America; as a student of education he ranks with the best professors of the science; in practical and successful school experience he surpasses all candidates whom the state board may take under advise-

ment. If the educators and friends of the schools in New England were left to decide the question, Dr. Balliet's election would be substantially unanimous. THE SCHOOL JOURNAL believes that the board of education recognizes all this, and that if Dr. Balliet can be prevailed upon to accept the secretaryship his election will soon be greeted as an accomplished fact.

The lack of loyalty shown by a few of the principals of Newark, N. J., to their chief cannot but work mischief that must seriously interfere with the educational welfare of the schools of that city. Dr. Poland has proved himself to be a conscientious superintendent, zealously laboring for the advancement of the Newark schools and the improvement of the efficiency of the teaching, in accordance with his convictions of what is right and best. Differing so markedly from his predecessor in temperament, attitude, and previous experience in school work and administration, it was to be expected that there would be friction. But instead of hailing the first sign of arising criticism among disturbed teachers as an excuse for what is nothing more nor less than backbiting and sedition, every supervisor, principal, and teacher in the city should have stood firmly by his appointed chief. Honest criticism should have been aired only in conference with the superintendent. If Dr. Poland has made a mistake he could have been convinced of it without difficulty. An infallible superintendent is not to be found on earth. But no mistake, however grave, can serve as a defence of such attacks as Dr. Poland has been subjected to by employees of the board of education. The ways of the pothouse heeler are despicable in any intelligent person, and in a teacher there should not be found even the penumbra of a shadow of a trace of them. Such procedure as has been going on in Newark for some time past is the sort of thing that must open the doors wide to party politics. The welfare of the city demands that the discipline of the system be speedily restored, by whatever measures may be necessary to accomplish that end. THE SCHOOL JOURNAL trusts that the board of education will look at the problem from the standpoint of intelligent citizenship, considering only the best interests of the schools, and that it will put an end to the bickerings that are at present interfering with the carrying on of the legitimate purposes of public instruction.

The academy of Northwestern university has, in its forty-five years of existence, developed into a great preparatory to college, doing for Illinois and the great Northwest what the Phillips academies are doing for the East. The high respect in which it is held has been won by honest and intelligent effort, chiefly under the present head-master, Dr. Herbert Franklin Fiske, the thirtieth anniversary of whose incumbency is to be remembered by a public celebration at Evanston, Illinois, on October 31. A fuller note of the school and its founder will have to be deferred to next week.

The amount paid out in the United States per capita for higher education inclusive of the secondary or preparatory schools which are in direct affiliation with the universities and colleges, is thirty-five cents. In Switzerland it is 21.8 cents; Great Britain, 21.7; Germany, 14.3; Belgium 11.4; Austria, 11.3; Norway, 8.3; Hungary, 7.1; Italy, 7; Greece, 4.3; Russia, 3.7, and Spain, 2.8.

A veteran of the civil war is not entitled to preference over other candidates in a contest for a school principalship. This is the sensible suggestion laid down by Supreme Court Justice Nash, of Rochester, N. Y. Col. Samuel C. Pierce, of Rochester, is a veteran of the civil war, and when the board of education refused to reappoint him to a principalship in the schools he sought to mandamus the board to compel his appointment, urging that he was entitled to preference over other candidates who were appointed.

The court held that the position of principal of the public schools is not in the service in which veterans are entitled to preference, and that the provisions of the civil

service law, giving preference to veterans apply only to the unclassified service.

The Mosely Commission.

The extent to which American technical and public schools have proved their superiority in the eyes of English educators is perhaps shown by the visit to this country of a commission of representative British educators who arrived the other day on the steamship Philadelphia of the American Line of the International Marine Mercantile Company. This commission which expects to study practically every side of educational effort in this country is headed by Mr. Alfred Mosely, the well-known English social investigator, who recently brought a commission of British trade unionists to the United States. Among the men now visiting us will be found experts in elementary, intermediate, technical, and university work, as well as professors in medicine, economics, engineering, theology, and pedagogy.

Mr. Mosely, who is paying the expenses of the trip, believes that he discovered during his recent visit here that the American school system is much better than that of the United Kingdom, and he thinks by bringing over the men who are prominent in educational fields of England, Scotland, and Ireland he may effect something toward reorganization of British education.

The complete list of the members of this commission is interesting as showing the high character and varied attainments of the party. The following gentlemen compose it:

Arthur Anderton, J.P., alderman and chairman of the Technical Instruction Committee of the West Riding county council.

W. E. Ayrtton, F.R.S., professor of physics in the Central Technical college; past president of the Institution of Electrical Engineers.

Thomas Barclay, LL.B., Ph.D., late president of the Paris chamber of commerce.

A. W. Black, J.P., mayor of Nottingham, chairman of the Nottingham education committee.

R. Blair, M.A., B.Sc., assistant secretary for technical instruction of the Department of Agriculture and Technical Instruction of Ireland. Nominated by the Department of Agriculture and Technical Instruction, Ireland.

J. Rose Bradford, M.D., F.R.C.S., F.R.S., professor of medicine, University college, London.

G. H. Cockburn, late chairman of Leeds school board. The Bishop of Coventry, late chairman of the Birmingham school board.

H. Coward, president of the National Union of Teachers. Nominated by the National Union of Teachers.

Rev. Professor Finlay, S.J., F.R.U.I., member of the Intermediate Education Board and the Technical Education Board, Ireland, professor of political economy, University college, Dublin. Nominated as official representative of the Board of Agriculture and Technical Education of Ireland.

T. Gregory Foster, Ph. D., assistant professor of English in University college, London, and secretary to the college. W. C. Fletcher, M.A., late fellow of St. John's college, Cambridge, head master of the Liverpool institute, Liverpool.

W. A. Gaskell, M.D., F.R.S., fellow of Trinity Hall, Cambridge; university lecturer in physiology.

Rev. H. B. Gray, D.D., Warden of Bradfield college.

W. P. Groser, of the Inner Temple; representing the Parliamentary industry committee, and to inquire into legal education.

C. J. Hamilton, B. A. Camb., F.F.S., (Cambridge), Lecturer on political economy, University college, Cardiff; secretary to the commission.

J. R. Heape, chairman of the Rochdale Technical school. Rev. A. W. Jephson, M.A., member of the London school board.

William Jones, M.P., for Arfon Division of Carnarvon; representing the Parliamentary industry committee.

Magnus MacLaren, M.A., D.Sc., professor of electrical engineering in the Glasgow and West of Scotland Technical college, Glasgow.

Rev. T. L. Papillon, M.A., vicar of Writtle, Essex, late fellow and tutor of New college, Oxford; representing religious education.

Herbert R. Rathbone, B.A., barrister-at-law, member of the education committee and deputy-chairman of the committee on elementary education, Liverpool.

H. R. Reichel, LL.D., late fellow of All Souls', Oxford, principal of the University college of North Wales, Bangor, and member of the Welsh intermediate education board.

John Rhys, LL.D., professor of Celtic in the University of Oxford.

W. Ripper, M.I.C.E., professor of engineering in University college, Sheffield; member of the Sheffield education committee.

Sir Albert Kaye Rollit, LL.D., C.I. D., M.P., vice-president of London chamber of commerce (nominated by the Association of Municipal Corporations).

Charles Rowley, M.A., J.P., member of the Manchester education committee and of the Manchester School of Technology, chairman of the Manchester School of Art.

A. J. Shepherd, chairman of the Technical Education Board of the London county council.

Arthur Edmund Spender, B.A., director of Plymouth Girls' High school, member of Plymouth chamber of commerce. Executive representing Plymouth.

John Whitburn, member of the education committee of Newcastle-on-Tyne.

The Roman Catholic View.

Cardinal Gibbons has given out an interview on various social problems of the times. Speaking of the public school system of the United States, he said:

"The system of public education in this country is imperfect and vicious, and undermines the religion of our youth. We want our children to receive an education that will not only make them learned but pious men and women.

"The religious and secular education of our children cannot be divorced from each other without inflicting a fatal wound upon the soul. The usual consequence of such a separation is to paralyze the moral faculty and to foment a spirit of indifference.

"The intellectual and moral growth of our children should go hand in hand, otherwise their education is shallow and fragmentary, and often proves a curse instead of a blessing.

"Guizot expressed himself forcibly and clearly on this point.

"In order," said he, "to make popular education truly good and socially useful, it must be fundamentally religious. It is necessary that national education should be given and received in the midst of a religious atmosphere, and that religious impressions, and religious observances should penetrate into all its parts. Religion is not a study or an exercise to be restricted to a certain place or a certain hour; it is a faith and a law which ought to be felt everywhere, and which, after this manner alone, can exercise all its beneficial influences upon our mind and upon our life."

"The remedy for these defects would be supplied if the denominational system which now obtains in Canada were applied in our public schools."

A New Move.

The New Jersey Federation of German Catholic Societies has adopted a resolution asking the legislature for state aid for the maintenance of Catholic parochial schools. It is declared by the federation that since the members of the Catholic faith in New Jersey pay an equal share in the taxes it is but reasonable that a part of the expenses of educating these children should be paid by the state. A clause of the state constitution forbids the appropriation of state moneys to sectarian purposes. To get around this prohibition, it is proposed to put the parochial schools under the supervision of the state superintendent of public instruction—the parochial teachers, however, to remain in charge, and a half-hour's religious lesson to be allowed after school hours.

Children's Eyes.

A sub-committee of the British association, after a careful investigation in the English schools, has presented a report on the eye-sight of school children. It found that the three principal preventable causes of defective sight in schools were; defective and flickering lighting of school buildings and rooms, faulty positions of pupils in regard to light and their work; bad type of print and writing both in books and on blackboards. To these are added defective nutrition, insufficient sleep, home habits and conditions injurious to the general health, and home lessons conducted under unfavorable light conditions.

Cost of Education in New York State.

At a meeting of the executive committee of the New York state board of regents held Oct. 9, financial summaries covering the past three years, together with estimates for the coming year, were submitted by Secretary Parsons. As compared with 1900 the direct appropriations in 1901 show a decrease of more than \$58,000; in 1902, a decrease of \$19,000, and in 1903 of \$12,000. These decreased appropriations, made possible thru an unexpended balance in the academic fund and in fees and balances reappropriated in 1900, are specially gratifying in view of the fact that in each of the three years there was an average increase of over \$46,000 in grants to schools and libraries.

Notwithstanding a greatly increased volume of work in 1901, 1902, and 1903 there was an average decrease of \$2,563.78 in salaries, services, and all other expenses.

Estimates approved by the regents for appropriations required in 1904 show: As compared with 1900 a decrease of \$33,085.79 in direct appropriations and a decrease of \$7,837.30 in fees and balances reappropriated; as compared with 1903 a decrease of \$1,120.79 in direct appropriations and a decrease of \$27,432.82 in fees and balances reappropriated. This large decrease in fees and balances reappropriated is due to the transfer to the supply bill of all appropriations of fees excepting salaries of permanent employees paid from fees, thus enabling the regents to avoid, hereafter, the necessity of estimating receipts so far ahead of the time when they become available, and therefore making it possible to give more exact estimates.

The total in salaries for 1904 is \$300 less than in 1903 at follows:

Reductions.—In home education, one assistant at \$900, one assistant at \$720; library school fees, one assistant at \$720, one clerk at \$480; in state library, sublibrarian reference \$300, one assistant \$300, two assistants \$120 each; in state museum, lithographer \$300—total \$3,960.

Additions to staff.—In home education, two clerks at \$600 each and one clerk at \$360; library school fees, one assistant at \$900, one clerk at \$360; in state library, one clerk at \$480 and one clerk at \$360—total \$3,660.

Decrease for 1903.

As compared with 1902 the total expenditures of the university for 1903 show: A decrease of \$5,115.26 in grants to schools (tho the total was \$55,077 greater than in 1900). Expenses, however, have been less than the amount allowed therefor, and so we can make up this amount in the coming apportionment.

A decrease of \$474.46 in grants to libraries. After payment, however, of all approved applications up to the present limit of \$100, there is a balance more than equal to this amount toward the restoration of the \$200 limit. In 1903 approved applications amounted to \$29,863.56, but under the \$100 limit only \$21,704.17 was granted.

A decrease of \$5,583.76 in allowances to professional examiners and returns to state treasurer, salaries, services, and all other expenses of maintenance.

The total expenditures of the university for 1903, including grants to schools and libraries, the statutory allowances to professional examiners, and returns to state treasurer, salaries, services, and all other expenses of maintenance show a decrease over 1902 of \$11,173.48.

Wants Ten Millions and a Shorter Course.

At the annual meeting of the board of trustees of Columbia university, President Butler presented his report in which he declared that \$10,000,000 was needed to carry out the plans of the university. Of this sum \$2,000,000 is needed for South Field and the remainder for the following purposes: \$2,900,000 to pay the funded debt, \$2,500,000 to build and equip buildings, and \$2,600,000 to provide an annual income of \$100,000 to meet the most pressing needs. Among the buildings needed are a college hall, law school, and science buildings.

Dr. Butler submitted a proposal to form a cabinet of the deans of the schools connected with the university

and to increase their powers as the executive heads of their schools.

As to his suggestion of last year to reduce the length of the college course to two years he said:

"During the year this proposal has been somewhat fully discussed both within and without the university, with the result of strengthening my conviction that it is the wisest course for American universities to pursue. Any other policy yet proposed will, I think, sooner or later destroy the American college as well as give us at least one generation of either under educated or wastefully educated professional men holding university degrees."

As a result of a canvass of the opinions of the members of the faculty, Dr. Butler says:

"It is clear that the professors are practically unanimous in favoring a college course of two or more years' duration, or a course of two or more years in a scientific school of a collegiate rank or equivalent examinations, as a requirement for admission to the professional schools,

"In any readjustment of the relations between the college and the professional schools, it is essential to bear in mind that the college serves an end of its own, and is not to be treated merely as a school preparatory to professional studies. Therefore the readjustment must begin from and within the college itself, the peculiar purpose for which it exists being kept steadily in view.

"The college exists to foster sound learning and scholarships, habits of reflection and application, together with mental and spiritual growth and culture. To say that for these things leisure is needed is to say what is obvious; but to mistake mental sluggishness and lack of application for profitable leisure, and to wish to prolong such conditions is to commit a grave crime against youth in the name of high ideals."

Agency Energy.

Superintendents and principals often do not realize the benefits derived from close association with a reliable teachers' agency, and usually do not make use of this prompt means of securing position or teacher until forced to do so by necessity. Agencies are nowadays appealed to for teachers who are better than the average run of applicants, and they are expected to give a business judgment regarding the abilities of the candidate presented. This estimate is considered to be better than that which is biased by friendship and which may come from educators or persons prominent in other walks of life. The manager of an agency nowadays cannot afford to work for a candidate who does not possess the qualifications which make for success, for the simple reason that he cannot afford to, and this applies to the grade or class of candidate for every sort of position.

Kellogg's Teachers' Bureau began fourteen years ago to supply with this idea in mind. A number of excellent positions were filled the very first year. The work increased steadily. The prompt and efficient work has won for this Agency an enviable position.

Last June this Agency was asked to recommend for the principalship of the Allegheny, Pa., Preparatory School to fill a \$3,000 position. Two or three names were presented. The appointment was delayed while a large number of candidates were considered. With only two candidates in hand, Mr. Kellogg went out to Allegheny and secured the offer of this position for both candidates, one not being satisfied to accept on account of insufficient salary.

Years of patient work and study are required to make a successful agent. Kellogg's Bureau is about entering its fifteenth year. During this time it has been under one manager, who has formed a very wide acquaintance with colleges, schools, superintendents, and teachers. Hundreds of teachers have been supplied with excellent positions. The difficulty has been to find enough teachers. Inquiry from colleges, normal schools, and superintendents in the vicinity of New York concerning this Agency will confirm this statement.

Positions have been filled this year from Alaska to Central America and in colleges from Maine to Florida and as far west as Illinois. Nearly every position filled has been on the direct recommendation of Mr. Kellogg. Teachers in any department of work desiring a better position should begin at once on this matter. The manager will be glad to know of first class teachers anywhere worthy of and ready to work for advancement. Address, No. 61 East Ninth Street, N. Y.

The past, present, and future of Hood's Sarsaparilla are: It has cured, it is curing, it will cure.

Prof. George G. McCurdy, curator of the anthropological collection at Yale, has returned from Europe with important collections for the museum. In southern France he obtained many valuable specimens in the caverns and rock shelters inhabited by paleolithic man. In Belgium he made a collection representing practically the whole of the stone age in that country, including the so-called eoliths of the late tertiary and early quarternary deposits.

Arrangements have been perfected for important exchanges with the British museum, the Royal museum of natural history at Brussels, and the Musée Cinquantenaire.

The following new gifts to Columbia university have been announced: \$20,000 from an anonymous giver for the general purposes of the university, \$6,815 from alumni for the purchase of South Field, \$600 from St. Bartholomew's church for the development of Oriental languages, \$3,500 from F. A. Schermerhorn for the department of architecture, \$5,000 from George Foster Peabody for South Field, and \$1,025 from friends for the German lecture fund.

The total gifts during the past year amount to \$1,721,895.

Map Treasures.

Geographical students have been aroused by the announcement of an important discovery of maps by Herr Ruge, of Leipzig, Germany. He has found in the library of the ancient University of Helmstedt, Brunswick, a number of valuable old maps, including one of Denmark and South Scandinavia by Cornelius Anthonii; Fernando Secco's map of Portugal, dating from 1560; Antonius Weid's Russia, dated 1550; Christophorus Pyramin's Germany, dated 1547, and Agidius Bulionin's map of Savoy, dating from 1556.

Recent advices from Berlin announce that the geologists and cartographers employed by the Saxon government have completed a map at a cost of \$1,000,000. It is on a scale of 1 to 25,000, and is in 123 sheets. It shows the topography, geology, and water supply, exactly outlined, of every part of the kingdom of Saxony in a manner hitherto unapproached.

Aquatic Insects in New York State.

The University of the State of New York has just issued "Museum Bulletin," No. 68, which is an important contribution to our knowledge of aquatic insects. It has been prepared, under the direction of State Entomologist Felt, by Dr. James G. Needham, professor of biology in Lake Forest, Ill., university, in co-operation with certain members of the staff of Cornell university. This publication, of some 300 pages, is admirably illustrated by a series of fifty-two plates. It is a continuation of the work begun in 1900 at Saranac Inn, which had for its object the determination of the value of insects as food for fish.

A most valuable feature of the work is a monographic account by Dr. Needham of the damselflies (Zygoptera) of the state, completing his studies of dragonflies. Dr. Needham also presents a valuable contribution to our knowledge of the food of brook trout, and some heretofore unknown life histories of Diptera.

These studies are supplemented by A. D. MacGillwray, instructor at Cornell, who has prepared a comprehensive key to the families of Coleopterous Larvæ and a monographic account of a small group of beetles which live upon water lilies and present some interesting biological problems.

The contribution by Mr. Johannsen, also an instructor at Cornell, is most important because of its systematic account of several families of aquatic flies. The notorious black flies of the Adirondacks, which are not only annoying to man, but of great economic importance in some sections of the country, have been treated in this volume and material additions made to our knowledge of this interesting group. Our native species of mosquitos

and their allies have also received careful attention at the hands of Mr. Johannsen, and as a result one new genus and several new species have been characterized and the larvæ of a number described. He also characterizes several chiromids which constitute an important part of the dietary of fish.

The volume is brought to a close by Dr. Davis' account of the Sialidæ of North and South America. Certain of these are common, and undoubtedly have considerable influence upon the fauna of our streams.

The Humble Hen.

Those who see the humble hen picking up her living around the farm-house, little think how important she is after all. The last census, 1900, shows that the value of the poultry and eggs produced was \$281,000,000—more, in fact, than the value of the cattle and hogs slaughtered; more than the value of the wheat crop, more than the annual product of gold and silver. In 1899 there were nearly 234 millions of chickens in this country; they produced 1293 millions of eggs. In 1901 New York received 854 millions of eggs; Chicago received 570 millions. We exported 30 millions and got for them \$528,000.

But Russia is the great producer and exporter; in 1898 she sold abroad 1831 millions of eggs. Denmark is another large exporter. Great Britain bought of Russia 539 millions of eggs in one year; she spends \$26,000,000 for eggs, annually buying 1500 million of eggs. Egypt, and Morocco produce many eggs for export.

China knows the value of the humble hen. Almost every hut in the country has a drove of poultry about it. Some of our best varieties have come from the far east. In all countries that have been long settled chickens will be found. While looked upon with contempt they contribute largely to the food supply.



Helen Keller as She Is.

This photograph shows Helen Keller in quite a different light from that in which she is usually considered. The little girl without sight or hearing has grown into a beautiful woman of many accomplishments, and she has written a remarkable autobiography, "The Story of My Life," which Doubleday, Page & Company have published.

Notes of New Books.

Laboratory Manual of Inorganic Chemistry: One hundred topics in general qualitative and quantitative chemistry, by Rufus P. Williams, English High school, Boston.—This is a new edition of Mr. Williams' well-known work. Some few changes have been made in the selection of experiments, so rendering the book an improvement upon the earlier editions. The work of the pupil is well distributed between mere observation, so leading to induction, suggestions for original thought and analytical work. A few of the final experiments are directly quantitative. The use of the modern spelling and shortened names for acids and salts is especially to be commended. (Ginn & Company, Boston.) L. F. G.

Elements of Inorganic Chemistry, by Harry C. Jones, associate professor of physical chemistry in the Johns Hopkins university.—A great change has lately come into chemistry. It seems to be proved that reactions take place only when atoms are electrically charged, called ions. Professor Jones has selected the ordinary discussions and reactions and has modified the treatment of the subject to accord with these new discoveries. He has also carefully introduced molecular formulae from the beginning. These two features render the text unusually accurate. The arrangement of experiments at the close of the discussions of the various substances leads to careful reviews. The illustrations of the various pieces of apparatus used are such as to save all unnecessary descriptions by the instructor. These features render the book an excellent manual. (The Macmillan Company, New York and London. Price, \$1.25.) L. F. G.

If you would indulge in the luxury of a few genuine smiles read the book of short stories by Charles Battell Loomis, entitled, *Cheerful Americans*. You will admire the patriotism of the man who continually asserted while abroad that "There's only one Noo York," will be appalled at the self-confidence of the one who attempted to run an automobile without instruction, will be amused at "The man from Ochre Point, Noo Jersey," and so on to the end. These tales are really character sketches of eccentric people and there is not a dull one among the seventeen in this book. If one likes humor and odd situations presented in an attractive way, this is the book that will furnish unadulterated enjoyment. Florence Scovel Shinn, Fanny Y. Cory, F. L. Fithian, and F. R. Gruger contribute the illustrations, of which there are twenty-four. (Henry Holt & Co., New York).

A Story of Acadia, which deals with the scenes and the people that figure in Longfellow's "Evangeline," is beautifully told by Grace Kinnicutt, of the Cincinnati public schools. A delightful narrative of personal history of children and others who lived in that French settlement, with descriptions of the manners and customs of the people is blended with historical events of which we have all read. The type is large and clear and there are several good illustrations and a map. The children will be especially interested in this story. (A. Flanagan Company, Chicago.)

An exceedingly clever and engaging story has just been issued. It is *A Sequence in Hearts*, by Mary Moss. It is a love story containing some pictures of institutions with which everyone is familiar. In addition to its well developed plot and excellent character drawings, the reader with a sense for the fine distinctions of language will be attracted by the style. The author is sprightly, witty, and satirical as it suits her purpose. Miss Moss will surely be heard from again. (J. B. Lippincott Co., Philadelphia. Price, \$1.50).

American Inventions and Inventors.*

This is a book for supplementary reading for school children from ten to twelve years of age. "What is the most important historical matter for school children?" asks some one. The answer would be "That which relates to the advancement and development of mankind—the uplift of humanity, the progress of civilization." Perhaps this can best be shown by the history of inventions, particularly inventions relating to labor-saving machines and improved methods of transportation and communication. This book is built upon these pedagogical principles.

The book is comprised in six parts, each of which, in its development, is a climax, and the six parts as a whole show a climax. The development is so easy and so simple as to leave in the minds of the children a clear idea of human progress. Part first treats of "Heat," with seven chapters. I., Fire; II., Indian Homes; III., Colonial Homes; IV., Chimneys; V., Fuel; VI., Coal; VII., Matches. Part second treats of "Light," under the following heads. I., Torches; II., Candles; III., Whale Oil; IV., Kerosene; V., Illuminating Gas; VI., Electric Lighting; VII., Lighthouses. A little reflection will show here a remarkable line of development. Torches furnished us light from a solid. Candles are solid, but are liquefied before giving the light. In whale oil we have passed from a solid to a liquid. In kerosene also we have light from a liquid. Then we pass from a liquid to a gas,

invisible to the eye, and finally the electric lamp gives us light without the use of solid, liquid, or gas. This light is not the result of combustion, but is produced merely by a form of motion.

It will readily be seen that we start with the gross. Artificial light is furnished from a solid. We leave the solid and obtain our light from a liquid. Here man stayed a long time. Whale oil furnished him light for generations. Then he discovered that nature had stored away beneath the surface of the earth, large quantities of petroleum, and this discovery revolutionized the production of artificial light. Yet this light, as before, was produced from a liquid. Then came an onward movement, a progress still upward. The liquid was discarded and light was obtained from a gas. We have left the grosser solid, we have left the liquid, we obtain our artificial light from a gas, the most attenuated and ethereal form of matter. Then comes a mighty uplift of man's thought in a new development, a great discovery, a marvelous invention; light from electricity. We no longer obtain artificial light from the combustion of a solid or of a liquid, or even of a gas. Electric motion gives us the most intense light of them all. Perhaps no more startling illustration of the upward progress of mankind, of his advancement from a lower to a higher, from the grosser to the more ethereal or spiritual, can be found in all science.

The third division of the subject relates to "Food," including especially Uncultivated Foods, Cultivated Foods, and Implements both for Planting and Harvesting. Then follows the discussion of "Clothing," including early Colonial Conditions in this country, the Cotton Gin, Cloth from Cotton and from Wool, with a discussion of Leather and of Needles, and a consideration of the Steam Engine as a source of power for the machinery necessary to the production of clothing. The three natural requisites for human life are food, clothing, and shelter. In a book adapted to older persons, shelter considered under the head of architecture would have given an interesting discussion, but it was not thought necessary for these younger pupils to undertake the consideration of so intricate a subject as that would be.

The last two parts of the book contain a discussion of inventions relating to (1) Travel, that is, Transportation; (2) Letters, or Communication. It will readily be seen that under travel we should consider Stage Coaches, Canoes, Sailing Vessels, Steam Boats, Railroads, etc. Under Letters, or Modes of Communication, we have to discuss Language, oral and written; the Printing Press, the Postal System, Signaling, the Telegraph, Submarine Cables, and the Telephone.

This brief outline may serve to show the ground covered by the book. The treatment is unique, so far as known never having been written up in this manner before. The material from beginning to end consists of things which all children are particularly interested in. The style is such as to absorb the attention of both children and grown people. Interesting incidents and anecdotes are interspersed thruout. One might confidently predict that the book will at once prove popular, and that it will have a very large sale.

Spoiled Children.

Usually Make Sickly Men and Women.

The "spoiled" child usually makes a weak, sickly man or woman because such a youngster has its own way about diet and eats and drinks things that are unfitted for any stomach, and sickness results.

"I was always a delicate, spoiled child and my parents used to let me drink coffee because I would cry for it," says a Georgia young woman: "When I entered school my nervousness increased and my parents thought it was due to my going to school, so they took me out again. But I did not get any better and my headaches got worse and weakened me, so that I was unfit for any duty. Sometimes I would go a whole day without any other nourishment than a cup of coffee.

"Last spring I had a bad attack of the Grippe and when I recovered I found that coffee nauseated me so I could not drink it and even a few swallows would cause a terrible burning in my stomach. It was at this time that a friend who had been much benefited by the use of Postum suggested that I try this food drink. I found it simply delicious and have used it ever since and the results speak for themselves. I have gained 12 pounds and my nerves are as steady as any one's.

"I consider myself well and strong and I make it a point now to take a cup of Postum with a cracker or two as soon as I come home from school in the afternoon. Postum with crackers or a biscuit makes my luncheon. It certainly saved my life, for I know coffee would have killed me in time had I continued drinking it.

"I have a young girl friend, a stenographer, who declares nothing strengthens and refreshes her like Postum and she has a little oil stove in her office and makes a cup of Postum at noontime. I have recommended this wonderful beverage to many of my friends who know what it has done for me." Name given by Postum Co., Battle Creek, Mich.

Look in each package for a copy of the famous little book, "The Road to Wellville."

*"American Inventions and Inventors." by William A. Mowry, Ph.D., New York and Boston. Silver, Burdett & Co. pp. 294. 35 cents.

The Educational Outlook.

The cost of the public elementary schools of the German empire is \$98,817,000 a year. Of this sum the states contribute \$28,645,000. The share of the states of the whole German empire for the support of the public elementary schools is about twenty-nine per cent. In the kingdom of Prussia the states contribute twenty-seven per cent.; in the eastern provinces of Prussia, between forty and fifty per cent.; in the western provinces only a little over twenty per cent.; and in Berlin, only 2.39 per cent.

The number of students registered at Vassar is 921, the largest in the history of the college, and a gain of 59 over last year. A laboratory in psychology has been added to the scientific equipment, and a course in laboratory psychology is being given by Prof. Margaret Washburn.

The University of North Carolina has received a gift of \$25,000 from Judge W. P. Bynum, of Charlotte, N. C., as a memorial to his grandson. The money will be used to build a museum.

The New York State Library school has opened with forty-seven students, representing thirty-two colleges and universities. Of the forty-seven, fifteen are men, a larger proportion than usual.

Mrs. Stanford is to build a new library at Leland Stanford, Jr., university, costing between \$500,000 and \$1,000,000, and it is reported will permanently endow the library with \$1,000,000. The public announcement of this gift will probably be made when the ground is broken for this building at the beginning of next year.

Pres. G. Stanley Hall, of Clark university, will make an address on "The Pedagogy of the Sunday School; or Some Points in the Psychology of Religion," at Union Theological seminary, at the opening service of the season of the department for lay workers on the evening of October 23.

Lehigh university observed its twenty-fourth annual celebration of Founder's day on October 8 by the formal opening of Williams hall, which is to be devoted to the departments of geology and mechanical engineering. Addresses were delivered by Prof. E. H. Williams, Jr., of the department of geology and mining, on "The Value of Geology and Biology in Technical Courses," and by Dr. Rossiter W. Raymond, secretary of the American Institute of Mining Engineers, on "Dynamics and Ethics of Modern Engineering."

The new building is 186 feet long by seventy wide; the area of each floor is over 12,000 square feet. The walls are constructed of brick and cement ornamented by carved stone work. The building is of "Mill" or slow-burning construction. One-half the space will be devoted to the department of geology and the other half to the department of mechanical engineering. The entire building is thoroly heated and ventilated by the most approved modern methods.

At a religious conference held at Aurora, Ill., on a motion of Dr. Edward L. Parks, professor at the Gammon Theological seminary at Atlanta, Ga., a petition to Congress was authorized in behalf of national schools for the negro. The conference advocates the national education of the descendants of freedmen along industrial lines, including agriculture, industry, food, and sanitation.

John Hays Hammond, who was associated in South Africa with Cecil Rhodes as mining engineer, and who is now a lecturer at Yale, has given \$50,000 for a metallurgical laboratory at Yale. The new laboratory will be used exclusively for study in mining machinery processes.

It is reported that by the will of the late Martin V. Bieger, of South Bend, Ind. Depauw university will receive \$100,000 and New York Chautauqua \$50,000.

Slow at Deciding.

Correspondence has been going on for over a year to determine whether the District of Columbia is entitled to two of the scholarships at Oxford provided for in the will of Cecil Rhodes. Commissioner Macfarland recently wrote directly to Secretary Hawksley, of the Rhodes commission, urging that the District of Columbia should be placed on the same ground with the territories, with which it compared in population, besides having the unique distinction of being the capital of the country and having a greater population than six of the states.

Mr. Hawksley replied that none of those who are to enjoy the Rhodes scholarships will be received at Oxford until 1904, and that the question as to the District of Columbia is still under consideration.

Thus far the trustees of the Rhodes estate have assigned none of the scholarships to the territories. Under the terms of the will the trustees have the authority to withhold for such time as they think fit any of the scholarships from the territories.

The Peabody Fund.

At the annual meeting of the board in charge of the Peabody Education Fund it was decided to appropriate \$10,000 for the development of the rural public schools in the South. Another appropriation of \$10,000 was made for summer schools. It was also decided that on and after October, 1904, the scholarships in the Nashville Normal school should be discontinued. Free scholarships for teachers have been provided in this normal school with an additional \$200 for living expenses. Some time ago the board decided to cut down the living expenses one-half and multiply the scholarships. Since that time there have sprung up scores of normal schools in various parts of the South, and so it is believed that the scholarship fund could be used with better results in assisting the rural schools and rural teachers.

The board selected Dr. Samuel A. Green as general agent of the fund, to succeed the late Dr. J. L. M. Curry. Dr. D. C. Gilman paid a glowing tribute to the memory of Dr. Curry.

The treasurer's report shows that fully \$85,000 was expended last year in appropriations. The fund now amounts to a trifle over \$2,100,000, altho George R. Peabody's original fund laid aside for education in the South was \$3,000,000. This fund decreased considerably, owing to the defaulting of certain Southern states on their bonds.

Millions for an Iowa College.

Frederick M. Hubbell, of Des Moines, Iowa, his wife joining, has conveyed property to the value of about \$5,000,000 to himself and his sons, "trustees of the said Frederick M. Hubbell estate," and to their successors in trust for the trustees and their lineal descendants, with a "limitation over" in legal phraseology, to the state of Iowa, to be used in founding a college in Des Moines. The "trust period" commences with the date of the declaration, and continues to the limit of time allowed by law, for a life or lives in being and twenty-one years thereafter. Estimating the duration of these lives at from sixty to seventy years, and adding the twenty-one years, the trust will in all probability last from eighty to ninety years, when the sum for the proposed college will be a magnificent one.

Religious Garb in Public Schools.

The schools in Lima, N. Y., are not opened as yet on account of a peculiar condition of affairs. The school trustee had engaged the same four teachers for the schools, as taught there last year. It happens that two of them are nuns and so must wear their religious garb, which State Supt. Skinner has declared cannot be worn in the public schools. Superintendent Skinner served an injunction on the trustee restraining him from permitting the teachers to wear a religious garb in the school-rooms.

This has resulted in a suit for wages on the teacher's contract, but which will eventually determine the constitutionality of Superintendent Skinner's decisions.

It is contended by the counsel for the nuns that Superintendent Skinner has overstepped the limits of his power, in undertaking to interpret the constitution, that his interpretation of it is not only a distortion but a perversion of its meaning and intent; that the framers of the section of the constitution invoked by Superintendent Skinner have left no doubt about the original interpretation of this section, that the highest legal authority in the state has flatly contradicted Superintendent Skinner's contentions; that the supreme court of Pennsylvania has declared similar decisions to be unconstitutional, that the superintendent of public instruction in Illinois has admitted that anyone who possesses the necessary educational qualifications and is of good moral character is entitled to a certificate to teach school, and that school boards are justified in employing any one to teach who holds a proper certificate.

This is only one of the teachers' claims. They appeal to other sections of the constitution of New York and also of the United States, which guarantee them rights and privileges as American citizens.

The Situation at Lima.

Up to the present writing 300 children of the section of New York state around Lima have been out of school a month. State Superintendent Skinner tried to remedy the situation by sending a representative to Lima. He carried an order to Patrick Hendrick, the school trustee, ordering him to open the doors of two school-houses, to employ two duly qualified teachers, and to compel those teachers to observe the terms and conditions as to dress and garb prescribed in the decision of the appeal of Alfred K. Bates against Patrick Hendrick, bearing the date, May 28, 1903.

A special school meeting of the district was held at once to consider this order. It was unanimously decided to disregard the order.

Trustee Hendrick claims that Superintendent Skinner's instructions do not cover the case, as they fail to direct him regarding the contract already engaged in between the two nuns who taught last year and were re-engaged for this year. They were, and are, duly qualified teachers, and he wants Superintendent Skinner to inform him how to annul the contract with them.

The school board refuses to pay salaries to those not teaching, and Mr. Hendrick does not propose to pay out of his own pocket; consequently, Dr. Skinner's order to open school within five days has been disregarded.

Agricultural Study.

Upon assuming his duties as director of the Cornell College of Agriculture, Prof. Liberty H. Bailey inaugurated changes in the heads of departments and the

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course of instruction offered. Among the new heads of departments are Thomas F. Hunt, professor of agronomy; R. H. Pearson, professor of dairy industry, and Jay A. Bonesteel, professor of soil investigation.

Particular stress is to be laid upon agricultural economics, on the best method of reaching the farmer, and upon the improvement of rural schools. The needs and characteristics of the farming population will be studied. New courses along these lines have been introduced and also special two-year courses for teachers taking up nature work, and also for landscape architects.

Strikes in Minnesota.

Many of the mills in Minneapolis, Minn., are closed on account of strikes, and the strikers have become incensed at the educational authorities because they have allowed the students to act as strike breakers. It is reported that the principal of one of the high schools informed his pupils that the mills afforded an excellent opportunity for work. As a result, thirty students went into the mills. The strikers are highly incensed at the action of the principal, which they say was uncalled for. They think that schools are public institutions and that a teacher has no right to try to influence his pupils to take part in labor troubles.

Another source of annoyance to the strikers is the state university. More than eighty students are now at work in the mills. The strikers notified the university authorities that they would block all bills making appropriations for the university unless the students left their new employment. The faculty refused to interfere.

Chicago Items.

The Chicago board of education has passed a new list of books for supplementary reading.

New microscopes are to be bought at an expense of \$600 for the Medill high school.

Gymnastic apparatus has been ordered for several schools.

Prin. Henry C. Cox, author of the exercises in algebra used in the city schools, has been given permission to use the same for supplying outside schools, the copyright being held by the board of education.

It has been announced that the system of heating employed in the Chicago schools has been copied by Paris.

Mrs. Annie K. Sullivan has been elected head assistant at the Coleman school, and Miss Gertrude L. Bridgman has been given a similar position at the Bradwell school.

The following Chicago principals have resigned: Electa E. Dewey, Mosely school; Maria H. Sayward, Motley school; John S. Welch, Yale Practice school, and Emily L. French, Ward school.

The University of Chicago has completed arrangements for affiliation with one of the best preparatory schools in France. Dr. Harper has announced that the Ecole des Roches will annually send a boy to the University of Chicago for a year's study.

Considerable surprise has been occasioned by the announcement that the registration at the University of Chicago this year shows a falling off of 700. The official figures of registration are 1,553 as compared with 2,253 last year.

W. S. Rowley, M. D., Cleveland, O., writes: I take great pleasure in saying that I have found antikamnia tablets very valuable in both acute and chronic rheumatism, also in all forms of neuralgia, and as yet I have not seen any depressant action. I prescribe antikamnia in five-grain tablets giving one every two or three hours.—North American Practitioner.

The fall meeting of the New England History Teachers' Association will be held at the Girls' Latin school, Copley square, Boston, on Saturday October 17. The subject for discussion at the morning session will be "The Teaching of Civil Government in Schools." The discussion will be opened by Prof. A. Lawrence Lowell, of Harvard university, and continued by Wilson R. Butler, head master of the New Bedford high school and Prin. Charles S. Chapin, of the Rhode Island Normal school, Providence. A luncheon will follow at the Hotel Westminster, at which the speakers will be the Hon. Frederick W. Dallinger, of Cambridge, and Prof. Albert Bushnell Hart, of Harvard.

CAMBRIDGE, MASS.—A number of notable changes have been made in the faculty of Harvard university. Professor Taussig, of the department of economics, has returned to work after three years abroad. Dr. A. T. Jaggard is to serve as regent. Prof. Charles J. Bullock, of Williams college, the author of several books on American finance, has been appointed assistant professor of economics for five years. Prof. Frederick F. Turner, of the University of Wisconsin, will give several courses in history. Prof. Hans Oertel, of Yale university, will lecture on comparative philology. Prof. Edward Capps, of Chicago university, will lecture on the Greek drama.

President Harris, of Amherst college, has announced that by the gift of a daughter of the late Charles Pratt, of Brooklyn, N. Y., the department of physical culture at the college is to receive an additional annual income of \$1,500. Under the conditions of the gift, a graduate of the college, complying with certain requirements, may by a year or more of work in the theory and practice of physical education, fit himself to become a teacher of that science, while in the meantime, as incidental to his study, assisting in the work of the college department.

The endowment is the first of its kind, so far as is known, and rounds out the physical training system of Amherst. The college maintains a highly developed system of instruction, which begins when the incoming freshman receives his preliminary physical examination, and ends four years later, when, as a senior, he is finally examined in order to determine what his physical improvement has been.

Dr. H. I. Turner has been appointed assistant in chemistry to aid Professor Michael. He is a graduate of Johns Hopkins, having received the degree of Ph.D. in 1899. From that time until 1902 he was associate professor of chemistry in the Southern Medical college, Baltimore, and last year he was instructor in chemistry in the State Normal school, at Milwaukee, Wis.

College and Preparatory Schools.

The New England Association of Colleges and Preparatory Schools held its eighteenth annual meeting in Boston on Oct. 9 and 10. President Capen, of Tufts college, presided at the sessions. Prof. Mary A. Jordan, of Smith college, spoke on "Influential Fallacies in Education." A discussion followed led by Prin. E. Harlow Russell, of the Worcester state normal, and by Prof. William MacDonald, of Brown university. The latter said that too many students are now going to college who ought not to. The mob, the great rank and file of men and women, is the problem we have to face. He was inclined to believe that the next great educational reform will be in moral education. It is a gross delusion to think we can fit men and women for the complex life of this day and leave out of consideration the moral element.

Prof. William E. Story, of Clark university, spoke on "The Unification of Mathematics in the School Curriculum." He favored a simplifying of mathematics and an earlier introduction of its fundamental principles into the schools, advocating it as a part of the kindergarten system.

Mr. John C. Packard discussed "Mathematics and the Coördination of Mathematics and Physics in Secondary Schools." He severely criticized the continuance of the old-fashioned idea of pure mathematics. He would substitute applied mathematics, and coördinate elementary algebra and plain geometry with physics and manual training. He urged that school mathematics should be made intensely practical. He said there should be a constant effort to make the study of mathematics seem real and useful to the student, to the end that he may be able to do as well as to see.

Prof. Edwin H. Hall, of Harvard university, and William A. Francis, instructor of mathematics at Phillips Exeter academy, discussed the paper. Professor Hall urged that the importance of the pupil's thinking out his problem was greater than his solving it, no matter how practical.

"School and College in their Relation to Public Health" was the final topic of the meeting and created the liveliest discussion. Prof. Anna May Soule, of Mount Holyoke, was the formal speaker. She advanced as a tentative suggestion a physical requirement for entrance to college. She said that this was supported by practical and ethical arguments for its effectiveness in cutting down the weeding-out process, for keeping up the standard of the college work, and for the uplift of society.

The discussion was opened by Miss Lucille Eaton Hill, of Wellesley college, and her remarks will probably lead to the appointment of a committee to consider the subject of abuses of physical training in the schools. She said that physical training is not all comprised in gymnasiums. Five things are a necessary part of this education—food, rest, exercise, bathing and clothing. She urged that the school authorities were not true to the little share they have in health building. Basket ball, she said, should be stopped absolutely, so far as girls under the college age are concerned, and it should be admitted only tentatively and under professional supervision to a place among sports open to women of any age. The physical effects upon young girls, the chances of permanent injury to beauty and health, the evil influence of such excitement upon the emotional and nervous feminine nature, and the tendency to unsex the player, for she declared that the competitive game, with its traveling about, its exhibitions before audiences and its cultivation of the win-at-any-cost spirit, was not womanly, and made neither for character nor refinement—were all urged against the game for young girls. For its vogue she blamed, not so much those who reveled in play, as the school boards and the principals who permit and in some cases encourage it.

The following officers were elected for the ensuing year: President, Prin. William Gallagher, of Thayer academy, Brantree; vice-presidents, Prof. Mary A. Jordan, of Smith college and Prin. Harlan P. Amen, of Phillips Exeter academy; secretary and treasurer, Ray Greene Huling, of Cambridge; executive committee, Anson Phelps Stokes, Jr., of Yale, Supt. Fred W. Atkinson of Newton, Edward H. Smiley, of Hartford, Conn., Pres. Caroline Hazard, of Wellesley, and Prof. Edwin H. Hall, of Harvard.

The association has 384 members, of whom 153 represent the colleges, 105 the high schools, and 115 private or endowed schools, and 11 other branches.

The Greater New York.

The regular meeting of the New York Educational Council will be held in Law Room No. 1, New York university, Washington square, on Saturday, October 17, at 10:30 A. M. The topic for discussion will be "Suggestive Teaching," opened by Prin. De Forest A. Preston, of Brooklyn.

The Women Principals' Association of Brooklyn, has elected the following officers for the ensuing year: President, Miss Honor E. Quinn, P. S. No. 63; vice-president, Miss Eleanor E. Elliott, P. S. No. 57; secretary, Miss Emily G. Bridgham, P. S. No. 111; treasurer, Miss Mary J. Merritt, P. S. No. 29.

The regular annual meeting of the Brooklyn Teachers' Association will be on the evening of October 23, in the Girls' high school. Superintendent Hughes of Toronto will be the speaker of the evening.

Dr. L. H. Gulick, director of physical training, reports considerable difficulty in securing teachers in his branch of work. Candidates must be college graduates and must have had two years' professional training in gymnastic work and three years' experience in teaching the subject.

The Brooklyn Teachers' Association announces that, owing to the great scope of the work of the studies and lectures committees this year, sub-divisions and sub-committees have become necessary. The following divisions have been made: German and French, Dr. George B. Germann, P. S. No. 94; art and water color drawing, Lewis H. Tuthill, P. S. No. 9; science, J. Newton Gray, Manual Training High school; geography, Prin. William McAndrew, Girls' Technical High school, Manhattan; reading and literature, Supt. James M. Edsall; nature, Miss Clara C. Calkins, P. S. No. 6; English, Miss Emma L. Johnston, P. S. No. 140; mathematics, Wesley W. Smith, P. S. 102; English and American history, John J. Malarkey, P. S. No. 127; school management, Andrew I. Sherman, P. S. No. 15.

The following chairmen of committees have been appointed to supervise the work which New York schools are to exhibit at the St. Louis exposition:

English—Principal Michleborough, of the Boys' High school, Brooklyn; mathematics, Dr. Buchanan, De Witt Clinton High school, Manhattan; Latin and Greek—Mr. Lyman, Eastern District High school, Brooklyn; French and German, Dr. Wight, Wadleigh High school, Manhattan; history and economics, Dr. Shepard, High School of Commerce, Manhattan; physics, chemistry, and biology—Mr. Goodwin, Morris High school, Bronx. Drawing, Dr. Gunnison, Erasmus Hall school; manual training—Mr. Larkins, Manual Training High school, Brooklyn; commercial branches—Mr. Moore, Commercial High school, Brooklyn; industrial branches and physical training—Mr. McAndrew, Girls' Technical High school, Manhattan.

The third district held the first meeting of the school year, on September 25, in P. S. No. 2, with Mr. Edward Phillips as chairman. Resolutions of regret were adopted for the death of Dr. Haskell, late superintendent of the district. The report of District Superintendent Joseph S. Taylor showed that the number of part-time classes in the third district had grown to such a large figure (there being 3,760 children in this district on part time) that the local school board decided it to be necessary to point out to the board of education the expediency of building an additional school in or near the third district.

At the last regular meeting of the local school board of the Forty-first district, Queens, the question of the overcrowding of P. S. Nos. 71 and 74 was thoroly discussed. Of the thirty-five classes in these schools all but one are on part time, an increase of fifty per cent. of last year. There are no annexes available in the district and the local board urged the board of education to either erect a portable school-house or else arrange with some property owner to erect a temporary school.

The board of superintendents has decided to recommend the consolidation of the departments of P. S. No. 45, Manhattan.

The annual report and list of members of the New York section of the Society of Chemical Industry has recently appeared in a neat pamphlet. During the past year 204 members have joined the section, making a total membership in the United States of 1,116. The officers for the ensuing year are: Chairman, Dr. Virgil Coblenz, professor of chemistry at the New York College of Pharmacy; vice-chairman, Dr. Russell W. Moore, of New York; treasurer, R. C. Woodcock, New York; secretary, Dr. H. Schweitzer, of New York.

Teachers college offers a sixty-hour course in biblical literature, which has been accepted by the board of examiners to count toward exemption from examinations in English for a license of assistant to principal. The class meets on Mondays and Fridays at four thirty o'clock.

The Bryson library at Teachers college has been merged with the Columbia university library, and all the books on education, formerly at Columbia, have been moved to Teachers college.

It has been announced that no nominations for the advisory board of the new school of journalism have been received by the trustees of Columbia university. The board is to be appointed on the nomination of Mr. Pulitzer, who is still absent from this country, and will not make these nominations until after his return next month. Work upon the building will be suspended until the plans have been submitted to the advisory board when constituted. As a result, it is not likely that the building can be completed and the school of journalism opened in September, 1904, as expected.

The enrollment in the freshman class of the college department at New York university exceeds that of last year by twenty per cent. The upper classes have returned in an unusual large percentage.

Ground has been broken at Columbia university for the school of journalism. The site is north of Fayerweather hall on Amsterdam avenue. The building is to be completed and ready for occupancy in the fall of 1904. The estimated cost, furnished and equipped, is about \$500,000.

The registration at Columbia university is less than last year for the college, schools of applied, political, and pure science, the schools of philosophy, medicine, and law. The total registration is 1,995 as against 2,149 at the corresponding time last year. The decrease is attributed to increased requirements for admission and the early date of the opening of the university. Teachers college reports a registration of 338.

The School of Pedagogy of New York university, was formally opened on September 26, for the 1903-1904 term.

Prof. J. P. Gordy, acting dean, addressed the students on "Some Impressions of Germany."

Twenty-Three Millions Needed.

The board of estimate and apportionment has given a hearing on the budget of the city of New York. The estimate of the board of education is the largest item of the budget, calling for \$23,260,472 for 1904, as against \$20,063,017 allowed last year. Chairman William Lummis, of the finance committee, in presenting the figures, explained that about \$2,000,000 will be required for 62,000 sittings that will be available next year. Each new school-house opened means an additional expense of \$100,000 a year, the cost being \$42 a child. To provide for the new sittings he said will call for the appointment of 889 new teachers, of whom 215 will be needed in the old schools.

Attendance in the summer schools, playgrounds, and evening recreation centers, Mr. Lummis said, had grown astonishingly. He cited that the attendance in the vacation schools in 1902 was 405,169, while in 1903 it was 567,891. Attendance at the playgrounds in 1902 was 2,194,666, and, in 1903, it was 3,346,291. Funds should be provided to meet the same ratio of increase next year.

Proposed changes in the janitor system will call for an increase of \$330,485. At present, the janitors receive large salaries, out of which they are supposed to pay their helpers. President Rogers, of the board of education, said he favored this time-honored system, but that the change was mandatory under a decision of the corporation counsel.

Chairman Donnelly, of the committee on buildings, said that the committee favored a change, as it would give the board control over the helpers and save these employees from small and unjust wages, which many janitors force them to accept to their own great profit. Under the new system the salaries of the male and female cleaners, helpers, and watchmen will be graded.

Hints on Public Speaking.

Frank Damrosch, supervisor of music in the New York city schools, recently addressed the pupils of the Girls' Technical High school on the art of public speaking. He explained the difficulties to be overcome and the value of a good voice. He said in part:

"In speaking to an audience speak with the lips. That is simple, but effective. All good speakers use this method. On the other hand, there are public men who talk down in their throats. You cannot hear them more than ten feet away. They are what are called lip-lazy. If they thought of their lips while speaking they could be understood. The proper use of the lips in speaking effects wonderful results.

"A second defect to avoid is nasal tones. You can avoid that too, by thinking of the lips.

"Another thing is to separate syllables. A speaker has to throw his voice a hundred feet or so, and it seems as tho some syllables travel faster than others. Thus the first syllable is telescoped by the second, and so on, so that the speech is jumbled. Separate the syllables and you will be clearly understood."

Brooklyn Teachers Win.

The court of appeals has handed down a decision giving the Brooklyn Teachers' Association a substantial victory in its suit against the New York board of education. The action was brought by Prin. Walter B. Gunnison, of the Erasmus Hall high school in behalf of the high school teachers to recover \$18,000 unpaid salaries. The corporation counsel demurred to the complaint on the ground that the action should have been brought

against the city of New York rather than against the board of education.

The counsel for the teachers contended that the educational system should be divorced from all politics, and should be in the hands of disinterested citizens, appointed by the mayor without pay.

On this subject the decision reads:

"If the board cannot be sued for teachers' wages and the teacher must resort to a suit against the city, then surely the board must have sunk into a mere city agency, and it no longer has any use for independent corporate powers. Public education then becomes a city function, exposed to the taint of current municipal politics, and to any and every general mismanagement that may prevail in city departments.

Evening School Registration.

The figures of registration in the New York evening schools show a decided increase over last year. Inasmuch as the compulsory education law requires the attendance of all boys between the ages of fourteen and sixteen who have not completed the course of study, the attendance this year will probably be more regular than unusual.

In all of the evening schools, both high and elementary, the registration this year is 25,572, as against 21,932 in 1902. The Manhattan high schools have registered 5,679 pupils, as compared with 5,017 last year, while in Brooklyn the registration is 2,718, an increase of 1,028.

The Bronx elementary schools show an increase of 621, the total registration being 1,402. The figures in the other boroughs are: Manhattan, 16,505 in 1903; 16,179 in 1902; Brooklyn, 6,723 in 1903; 4,469 in 1902; Queens, 271 in 1903; 153 in 1902; Richmond, 571 in 1903; 350 in 1902.

Grade "A" Licenses.

The New York court of appeals has heard the argument in the appeal from the decision of the appellate division on the "Grade A." license, which was in favor of the teachers. The decision in the case is not expected until the end of the month.

The purpose of the teachers' suit is to secure a peremptory writ of mandamus compelling City Superintendent Maxwell to prepare a list of persons to whom licenses have been granted, such lists to be for each grade or kind of license, and to compel the superintendent to place upon such lists all persons holding licenses for promotion upon the eligible lists or upon a list prepared by him pursuant to the by-laws of the board, and to recognize as eligible for appointment or promotion to any of the four upper grammar grades in the city schools all persons who have received the license known as Grade A.

The corporation counsel contended that the power of promotion is vested in the board of education under such restrictions as may itself see fit to impose. The Grade A license is not recognized by the board of education inasmuch as new requirements for promotion have been decided upon.

The lawyer for the teachers urged the court to command that all resolutions and instructions be rescinded and annulled by which the board of superintendents is prohibited from nominating for appointment or promotion to any of the upper grades, teachers whose names do not at present appear on the eligible lists; and that the board of education be commanded

to recognize all teachers holding Grade A certificates as eligible to any position to which they were hitherto made eligible by the possession of their licenses.

Naval Training.

Twenty-six young men were graduated from the schoolship St. Mary's this year. The graduating exercises were presided over by Commander G. C. Hanus, U. S. N., and addresses were delivered by James Weir, Jr., chairman of the executive committee of the nautical school; City Superintendent Maxwell; Capt. William G. Shackford; President Parsons, of the Maritime Exchange; and Capt. J. W. Miller, of the Chamber of Commerce. Pres. Henry A. Rogers, of the board of education presented the diplomas.

The St. Mary's is the nautical training school of New York city, and affords practically free instruction. A nominal charge of \$25 is required which entitles each boy to the use and renewal of the necessary dress uniform and working suits.

The course of study covers two years. During the first year instruction is given in the principles of navigation to and including "dead reckoning," grammar, geography, writing, and arithmetic. During the second year the boys are taught nautical astronomy, physical geography, history, algebra, rules of the road at sea, and first sea. The summer is spent in a cruise to Europe during which every boy is given an opportunity to handle the ship. While at sea the boys are arranged in two watches. They heave the lead, keep lookout, work the ship, and set, reef, or furl sail as required. In fact, every branch of navigation both practical and theoretical is taught and opportunity for practical work is afforded.

The discipline aboard ship is largely in the hands of the boys, who are divided into eight divisions, each in charge of a student officer, appointed for excellence in studies, conduct, and industry. Rigid inspections are made, and the utmost care of the boys is taken.

Columbia Building Site.

South Field, the nine-acre lot opposite the library of Columbia university, which has been desired by the trustees for many years, has become the property of the corporation. The deeds are now in its possession. The property occupies the two blocks between Amsterdam avenue and Broadway and 114th and 116th streets. It is valued at \$2,000,000.

Columbia has desired to acquire the property not only that she might expand, but to guard against the danger of the property being converted into building lots and thus the approach to the library spoiled.

Plans for the utilization of the new tract are now being prepared. They will probably provide for two academic buildings, six dormitories, and a grand esplanade. As soon as the plans have been completed, work will be begun on Hartley hall, the dormitory given to the university last June.

Texas Notes.

The North Texas state normal school has begun the third year of its history as a state institution, with an enrollment of over 400 pupils.

B. H. Dement, of Louisville, Ky., has accepted the chair of theology at Baylor university.

The annual report of the president of the school board of Houston denounces the presence of politics in the school system, the lack of education among the teachers, the free text-book system, and the mismanagement of the board. He announced the introduction of a commercial course in the high school and the return to corporal punishment.

Literary Notes.

The American Book Company has issued a number of important new books of late. Among them are: "Dresden's German Composition," by B. Mack Dresden, of the State Normal school, Oshkosh, Wis.; "Pearson's Latin Prose Composition," by Henry Carr Pearson, Horace Mann school, Teachers college; "The Baldwin Speller," by Supt. S. R. Shear, of Kingston, N. Y., assisted by Margaret T. Lynch, P. S. No. 2, White Plains, N. Y.; "Coleman's Physical Laboratory Manual," by S. E. Coleman, Oakland, Cal., high school, and "Dillard's Aus dem Deutschen Dichterwald"—a collection of favorite German poems, edited by Prof. J. H. Dillard, Tulane university.

It is understood that George Cary Eggleston is undertaking some important work connected with the presentation of American history along new lines characterized peculiarly by human interest.

The Architects' and Builders' Magazine for October contains an interesting article on "The Soldiers' and Sailors' Monument, New York," "Modern Architecture in Europe," the "American Renaissance," and the "Distribution of Hot Water." As usual the number is profusely and beautifully illustrated.

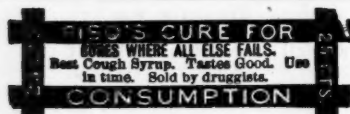
John Wiley & Sons have published "Principles of Forestry," by Prof. Samuel B. Green, of the University of Minnesota. It is short and practical, a compendium of useful information about lumber and its uses, with many convenient tables and lists.

Arrangements have been made for the publication in England of the following autumn books of Houghton, Mifflin & Company: "Long Will," by Florence Converse, "The Young Ice Whalers," by Winthrop Packard, and Lyman Abbott's "Henry Ward Beecher."

A one-volume edition of William Cullen Bryant's "New Library of Poetry and Song" is one of the fall publications of the Baker & Taylor Company. The book was revised in 1901. New plates and new poems were then added. The collection contains a number of poems by authors who did not put forth enough matter to attain to collected works of their own.

Prof. Albert Bushnell Hart's new volume on "Actual Government" in Longmans, Green & Company's American Citizen Series is a work concise in its thoroughness and well proportioned to meet the needs of the primary courses of instruction. The book is an impartial statement of how national, state, and local affairs prove to be conducted, the American governmental system being as it is. The tone of the book is especially healthy, and well calculated to interest the student in public affairs. A complete list of all the works that will be of practical assistance prefates the general text, and a separate bibliography introduces each chapter. There are several maps, a full index, and illustrations.

The third series of Mr. William H. Fleming's lessons, "How to Study Shakespeare," deals with "Much Ado About Nothing," "Antony and Cleopatra," "King John," "The Winter's Tale," and "Love's Labor Lost." The skeleton of Mr. Fleming's system is as follows: Source of the plot; explanatory notes; tables of acts and scenes in which characters appear, also the number of lines spoken by each character; questions; collateral reading; pronunciation of names—a useful feature not included in most aids to Shakespeare study. Doubleday, Page & Company are the publishers.



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The *Critic* for October contains some notable "composite" photographs of Shakespeare by Walter Rogers Furness; the beginning of an interesting story, "The Jessica Letters," "Margaret Fuller as a Teacher," by Annie Russell Marble, "Balzac's Short Stories," by Ferdinand Brunetiere and "Men of Letters at Columbia," by George S. Hellman. There are the usual departments, as always of value and interest.

The principal article in the *International Studio* for October is on "James McNeil Whistler, His Art and Influence," by A. L. Baldry. A number of Whistler etchings are reproduced. This is followed by "Reminiscences of Whistler," by Mortimer Menpes, recorded by Dorothy Menpes.

The September *House and Garden* has, among other articles "El Fureidis," at Montecito, California; "Old Pewter," by Edwin A. Barber, and "Red Rose Inn," at Villa Nova, Penna., by P. W. Humphreys.

Birds and Nature for September has plates showing the lark sparrow, the white-tailed ptarmigan, the black-billed cuckoo, the crested titmouse, the nest of the least bittern, besides minor gems, and green russula (edible mushroom) and fly mushroom (poisonous).

"The Power of the Senate" is one of the interesting topics discussed in the October *Atlantic*. Other articles are "Some Remarks on the Study of English Verse," by Henry Van Dyke and "College Rank and Distinction in Life," by A. Lawrence Lowell.

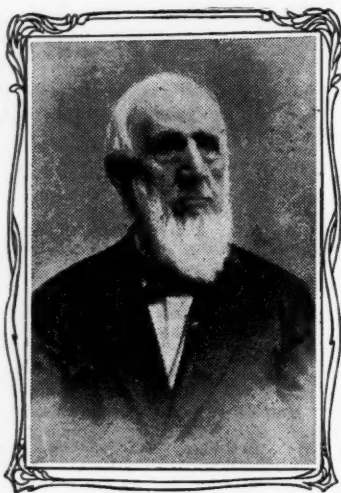
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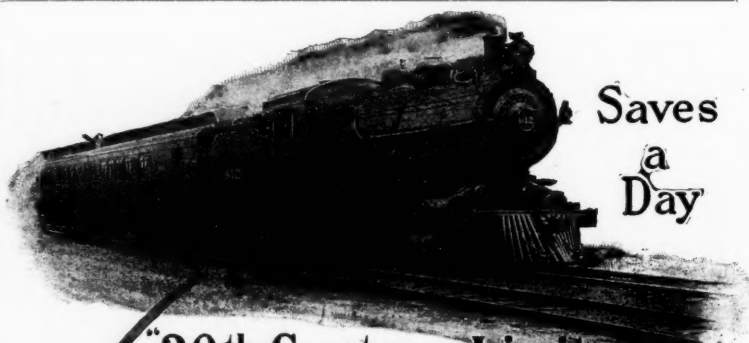
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Lippincott's for October contains Frederick Reddall's complete novel, "An Heir to Millions;" also six short stories, George Moore's "Avowals, II.," Agnes Repplier's "The Tourist," and Maud Howe's "Leo XIII."

Everybody's Magazine for October emphasizes the right of this excellent publication to a position as one of the best magazines. "The Madness of Much Money," by Alfred Henry Lewis, is perhaps the most noteworthy article and is an extremely clever satire on the foibles of our plutocracy. In addition to several short stories there are articles, full of information, on Chicago, London, and Labouchere. A description of the New Amsterdam theater is interesting as an exposition of the "new art."

The circulation of Everybody's has increased rapidly during the past few months and will undoubtedly continue to do so as long as the present high standard is maintained.

In anticipation of New York's coming celebration of the three hundredth anniversary of the arrival of Henry Hudson, the October *Cosmopolitan* has an illustrated article on the explorer by Thomas A. Janvier. Another notable article is the one on "Risking Life for Entertainment," which tells what risks show people run for reputation and money.

The October *St. Nicholas* has the usual wealth of stories, poems, and pictures. An article that will interest everybody, young and old, is "A Trip Through the New York Assay Office," by Joseph Henry Adams. In this building can be seen more precious metal than in any other building in the United States.

"The Jessica Letters," a new serial, is begun in the *Critic* for October. Walter Rogers Furness writes of "Composite Photography" applied to the portraits of Shakespeare.

The Story of Phoebe Snow.

If you have ever taken a summer railroad trip you will enjoy the "Story of Phoebe Snow," which describes in a series of dainty pictures the experiences of a pretty girl who went to Buffalo. The illustrations are in seven colors, each reproducing a design of the girl in white which the Lackawanna Railroad has made so familiar in the last few months. The booklet has a particularly pleasing cover and will afford considerable amusement, besides giving information which every traveler ought to know. It will be sent in response to request, accompanied by two cents in stamps, to T. W. Lee, General Passenger Agent, New York city.

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